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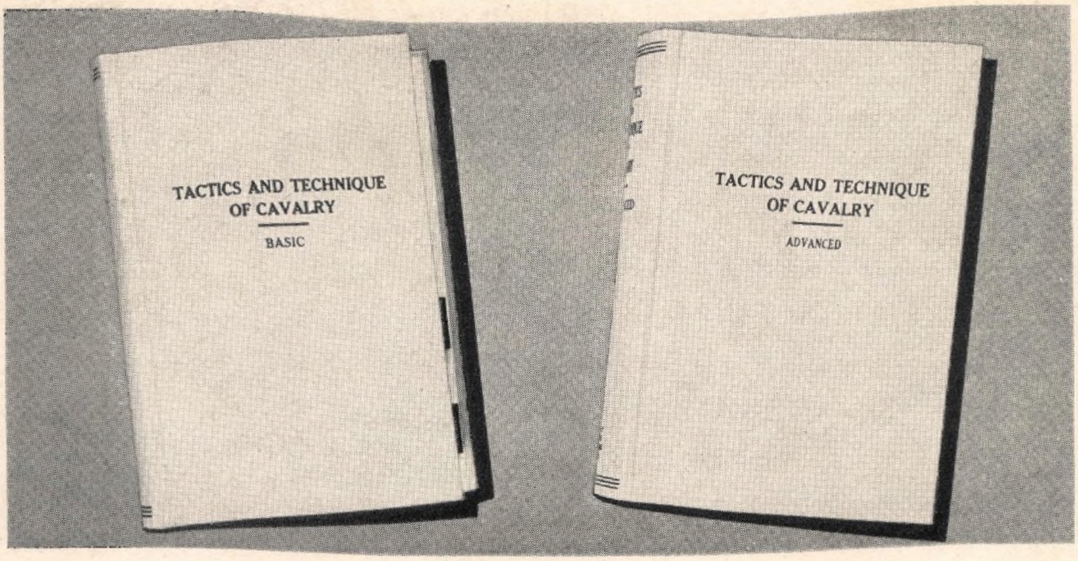
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Organized November 9, 1885

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CARDED

A Survey of

By Major General J. K. Herr, Chief of Cavalry

DURING the year 1940 we have been able to establish a sound basis for the future expansion of our Cavalry. We have proceeded on the basic idea that a military team, in order to be effective, must first be efficient in fundamental training and in organization, beginning with the individuals and the smallest units. When a football team is ineffective it is usually because it is lacking in the fundamentals of blocking and tackling. It has, therefore, been our endeavor to impress in all ranks the utmost necessity of beginning from the bottom. On a sound basis we can build surely. A pyramid must stand upon its base and not upon its apex. In the Cavalry School as well as in units these ideas have been stressed. Courses at the Cavalry School have been stripped down to emphasize the basic essentials of cavalry training requirements. The objective of our Cavalry School now is to produce in the least time individuals thoroughly trained in the essentials which are peculiar to *American Cavalry.*

We have further been able to secure as a first step in our organizational set-up a sound cavalry regiment. The nine-troop regiment as now organized is believed to be about the right size and possessed of the arms and equipment essential to speed and power. We have succeeded in adding to our brigade the needed antitank weapons and 81-mm. mortars both of which may be at any time attached to regiments. We have strengthened our division by the addition of a similar echelon of antitank weapons, by strengthening our mechanized reconnaissance squadron and by adding 105-mm. motorized artillery. We have succeeded in placing in the quartermaster squadron of the division two troops which are capable of transporting, portée, approximately a rifle squadron. It is possible to develop this to the point where an entire division of cavalry may be transported by trucks. Effort is being made to secure the approval of equipping some of the truck regiments in the higher echelons of Army, or GHQ, with tractor-trailers which will serve the double purpose of hauling supplies over good motor roads and also be available for transporting all or any part of the cavalry division. This is an entirely feasible project and will greatly enlarge the strategic mobility of our division. It is believed that the new cavalry division is the most versatile and powerful unit of its type which exists; with approximately 4,600 semi-automatic pistols, 1,342 rifles, 273 light machine guns, 356 heavy machine guns, 265 caliber .50 machine guns, sixty-seven 37-mm. antitank guns, and twenty-eight 81-mm. mortars. It is a self-contained unit of great fire power and battlefield maneuverability.

The 1st Cavalry Division, under present plans, will be entirely assembled at Fort Bliss, Texas, about the first of February. This concentration will permit the training of the 1st Cavalry Division in a progressive manner never before possible. The addition of approximately 50,000 acres of territory in that vicinity will be of untold value. A second project for the acquisition of 600,000 additional acres has been approved by the Land Board of the War Department but has not yet received the approval of the Bureau of the Budget.

The concentration of the 2d Cavalry Division in the near future is already provided for and we may well look forward to the eventual probability of a cavalry corps.

We also have one brigade of Texas National Guard now in training at Fort Bliss, Texas. We have every reason to believe that this brigade under its present leadership will develop into a very fine cavalry unit worthy of our best traditions.

We have succeeded in setting up two experimental corps cavalry regiments, the 6th Cavalry and the 4th Cavalry. Although the employment of these units has not been fully exploited, it has already been proved at various maneuvers that they are sound organizations, well designed for their task. Much is yet to be done along these lines, because there is a wide field for the employment of the horse and mechanized units in varying proportions and in various teams, depending in each case upon the precise situation as regards the terrain and the enemy forces. This unit must never be put in a straightjacket, nor must it be employed in a task for which it is not designed. There are seven of these regiments now being constituted from National Guard units. In order that the colonels and field officers of these regiments should receive a proper background, it was arranged that these officers should have an opportunity for a week's demonstration and training, some with the 6th and some with the 4th Cavalry. It is believed that this background will be of vast value to them.

In this connection it may be stated that when we devised the Corps Cavalry Regiment it was intended that this should be large enough not only to provide complete reconnaissance for a corps but to be so flexibly organized

Our Cavalry

that it would be susceptible of detaching reconnaissance teams for use with detached divisions. It is believed that this would render unnecessary a specific reconnaissance unit as an organic part of an infantry division. In planning the Corps Cavalry Regiment we were restricted by the limitation that it should be a small regiment and that no large regiment would be approved. It therefore became necessary to organize a regiment smaller than was intended. This being the case it became evident that separate additional reconnaissance units were needed for the Infantry divisions. Thus there has been set up for each Regular triangular division one Cavalry Divisional Reconnaissance Troop. This troop at present consists of scout cars and motorcycles. From the beginning we have recommended that this should be increased by the addition of one horse troop, portée, because of the fact that although motorized vehicles are useful for reconnaissance, particularly on roads, they of themselves cannot make a complete reconnaissance over all types of country. They must be augmented either by men on foot, or men on horses; and men on horses can do this with much greater effectiveness and rapidity. Thus a small squadron, part horse and part mechanized, is regarded as more effective than the present organization.

As the beginning of 1941 approaches, it is of interest to note the status of the cavalry. This is best indicated by the following figures:

CAVALRY STRENGTH, DECEMBER, 1940

	Officers	*Enlisted Men*
2 Cavalry Divisions	984	21,576
1 Cavalry Brigade (National Guard)	134	3,149
2 Regiments Horse, Regular Army	120	2,850
2 Regiments (H & M), Regular Army	124	2,934
7 Regiments (H & M), National Guard	434	10,269
9 Reconnaissance Troops, Infantry Division	54	1,269
1 Reconnaissance Troop, Panama	5	110
Cavalry School Detachments	64	581
Office Chief of Cavalry	10	6
	1,929	42,744

From the foregoing it may be seen that our cavalry is in a strong and healthy condition and is all set to go forward.

We must be dynamic, never static. We feel that our Cavalry will achieve great glory in the future. The field of opportunity is wide open. We must use our imagination. For instance, roads are going to be mighty unhealthy places. The vehicles and armored units must use them. Cavalry should specialize in going across country over all terrain, in dispersed formations, much after the manner of the hordes of Genghis Khan, seemingly scattered and out of hand but actually dispersed, in order, and under complete control. In this event it forms no profitable target for the airplane. All phases of operations across all manner of country and in dispersed formations must be practiced. We must work a great deal *in conjunction with the air as a team*. Just as the captain of a football team runs his men constantly through the plays until the timing becomes so adjusted and the performance so perfect that everything clicks, so the military team should be trained. One does not need many plays. They must be simple. Remember always that execution is more than 90 per cent of everything. It is getting things done that counts.

We now must have fine leadership. It must be remembered that no matter how good the football team may be or how well equipped, unless there is a leader, one who knows his stuff, to properly direct the plays, the team will never excel. A 100,000 horse power engine may be sitting on the track, ready and throbbing to go, but with a dead hand on the lever nothing happens. It is our aim to search out all those men who show great qualities of leadership—this applies to every grade. This leadership can only be developed by command duty. It is not given for every man to become a leader, the best of them are scarce. We must search them out and, when we find them, we must push them forward. We will find them and they will prove in no uncertain manner *what American Cavalry, well trained and finely equipped, can really accomplish.*

Finally, we have every reason to **look forward with confidence to the present development and the future progress of our Cavalry.**

☆ ☆ ☆ ☆

The Armored Force

By Lieutenant Colonel Percy G. Black, G.S.C.*

—Drawing by Edwin Finch, *Louisville Courier Journal.*

And Its Development

CARDED

Editor's Note: *This article deals, with only a part of the Armored Force, the Armored Division and larger components in which the Armored Division is included. It does not deal with the equally important mission of the G.H.Q. Battalions.*

Further, the reader should bear in mind that the article sets forth the primary mission of a Force composed of Armored Units in a major war in a decisive theater. It presupposes that the major units of the Army are already in offensive combat and gives the rôle of the Armored Troops as a part of a Field Army, or group of Armies. Like any other branch of the Service, Armored Troops are and must always be the servants of the high command to further the Infantry Battle.

* * *

DOWN through the history of warfare each new offensive weapon has been created to overcome a specific measure of defense and to fill a particular tactical rôle, the necessity for which has arisen from the experience of battle. Each war has been marked by a definite stage in the development of armament and tactics. Among civilized nations, each nation has had more or less equal facilities to produce weapons similar to those of its opponent, so that in modern times, no startlingly new weapon has suddenly appeared in the hands of one antagonist in sufficient quantity to achieve overwhelming victory. Surprise, the basis of strategic success, has not been obtained merely by the introduction of new weapons in warfare; but by their application on the field of battle.

Thus in the World War I, each side was continually seeking to break the deadlock of stabilized warfare caused primarily by the machine gun, in order to bring back the war of movement by which alone a decision could be obtained. To break this deadlock, the British introduced the tank, a weapon designed to combine fire and movement to overcome the static defense of trench warfare and to restore mobility to the battlefield. Imperfections of the original design, inadequacy of the number of tanks available and lack of experience in coördination with other arms, all combined to keep the tank from becoming the decisive weapon which it was intended to be.

Although in World War I the tank failed to achieve the decisive results expected, it was recognized that in this new weapon lay a potential power which might in the future prove to be the deciding factor. Tanks, however, are expensive, take time to manufacture and are a luxury which can only be indulged in by rich and powerful states.

Recognizing the potential power of the tank in 1918, the Allies, by the Treaty of Versailles, forbade Germany to manufacture tanks while England and France, in post war years, proceeded to develop their own mechanization and to formulate tactical doctrines for its employment.

The development of mechanization in France, however, was based primarily on a defensive strategy; a strategy which visualized a France firmly entrenched behind her fortified lines repelling the invader on a narrow front in a warfare which would in reality be an extension of the last war with a slight improvement in weapons. Mechanization would be limited by National Economy which would prohibit any nation from producing sufficient tanks to become a decisive element in battle. Motorization, however, would increase the radius of action of reconnaissance and, coupled with an ever growing air arm, prevent strategic surprise. In the next war, contact between opposing forces would be made far in advance of the main forces, who, with motorized and mechanized troops under cover of motorized and mechanized reconnaissance elements, would seek to occupy favorable terrain and to gain an initial advantage over the enemy. Once the main armies, however, became engaged the warfare of swift movement would cease, and again the shock action of infantry would decide the issue as it had in 1918. Attacks would then be launched on narrow fronts against limited objectives; objectives, which, one after the other, would be taken to finally break the invader and eventually pierce his defenses.

Mechanization was, therefore, developed in both France and England; *first, to extend the rôle of Cavalry,* and second, to provide a weapon of close support to the infantry attack. Light, fast moving tanks replaced the cumbersome World War types. British Cavalry regiments were mechanized to form reconnaissance units whose speed, radius of action and power could penetrate an enemy screen and enable them to operate far in advance of the main body. In France, the Division Legere was created, a mechanized cavalry division composed of motorized reconnaissance vehicles with a shock element of fast, powerful Summa tanks and Portée Chausseurs. Paralleling the mechanization of Cavalry, both France and England developed separate tank battalions, slower and more heavily armored to accompany the Infantry assault. As defensive armament against tanks made its appearance on the battlefields of Spain, armor was increased and the medium tank made its appearance as the anti-antitank weapon which would precede the light tank to the objective, clearing the path of enemy antitank guns.

During this entire process of development, however, there were ever present two limiting factors. First, the conception of warfare as an extension of World War methods in which the tank units, either as cavalry or as infantry accompanying weapons, would always be employed within the cadre of a larger force to accomplish specific battle missions in furtherance of the tactical mis-

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★Assistant C. of S., G-2, The Armored Force.

sion of the Corps or Army. Second, the factor of economy and of national industry which prevented the production of tanks in large quantities in time of peace, and forced their employment in relatively small units. Neither in the Italio-Ethiopian War nor in the Spanish Civil War were tanks present in sufficient quantity to indicate any other employment of armored troops. The conception of the Armored Force had not dawned upon the Allies.

Meantime, in Germany, deprived by the Treaty of Versailles of the possibilities of tank development, the General Staff had for ten years been studying and analyzing the causes of Germany's defeat in the last war. With better equipment, better leadership, and better training German arms had been defeated through attrition; attrition which grew out of the stalemate of the Western Front. The inability of the German high command to launch an attack that not only would penetrate the enemy's defensive line, but could be carried on to prevent the reëstablishing of equilibrium, had thwarted every effort and, in the end, had resulted in an exhaustion of the entire state which led inevitably to defeat.

In all the campaigns and battles from 1914 to 1918, the German offensive of March, 1918, had offered the greatest possibility of victory. In this last great offensive, the German attack had broken through the Allied positions, had created an immense salient within which the Allied troops had been forced from their trenches, and movement had again been restored to the battlefield. Yet in the end, this attack had failed. French and British reserves thrown into the battle at the last moment had once more been able to halt the German advance and to restore stability to the front.

Foch's own analysis of the German attack at Cambrai, written in 1918, best illustrates the German tactics employed.

"The German method of attack is characterized by surprise, violence, rapidity of execution, maneuver and the extreme depth of the penetration sought."

"After the first lines are taken it lengthens out and spreads out, the units in advance aiming as quickly as possible, at successive objectives, which have been indicated for them in advance, without having any preoccupation of their own flanks or for clearing up in their rear, to which task other units are assigned."

"The designation of these successive objectives does not imply any halt at any of them, but merely provides landmarks showing the direction to be followed."

"The Germans generally employ their best troops in the center of the attacking front in such a fashion as to give themselves every chance of obtaining a rapid and profound advance in the center."

"The maneuver consists, first, in enlarging rapidly the break thus opened, and then in attacking on the flanks of this break."

"The penetration in depth is obtained by the rapid and resolute march of the troops upon predetermined objectives situated far within the enemy's lines."

These then are the tactics which so nearly achieved victory for Germany in 1918. German study of these tactics found them correct. The Battle of Cambrai became the classic model of German offensive, yet it had failed. Why?

It had not failed because of any fault in tactics, but because the Germans had lacked a powerful *mobile reserve* which could have exploited the initial success so swiftly that the hostile reserves would not have had time to rally to the defense.

Observing tank development abroad, the German General Staff decided that here was the weapon which could be forged to give the answer to Cambrai, to restore movement to the field of battle, to attain the ultimate victory to turn initial success to the complete destruction of the enemy. Here lay the instrument through which the total war of Clausewitz could become once more a reality.

With the abrogation of the military terms of the Treaty of Versailles, Germany immediately set about the creation of an Armored Force. Two thousand light tanks were put in production and by 1937, Germany had equipped and organized a Corps of three Armored Divisions. These were the first *Armored Divisions* to make their appearance in any army in the world.

By 1938, the original light tanks, which were admittedly unsatisfactory, but which had been manufactured as a compromise imposed by the time factor and limitations of production, had been replaced by new model light and medium vehicles of greater speed, greater range, heavier armor and heavier armament. A fourth Armored Division had been organized and a light division resembling the French Division, Legere Mechanique, was under test. In 1939, a fifth Armored Division was added and as a result of experience in Czechoslovakia, the organization of the Light Division was changed to make it almost identical with the Armored Divisions and four more light divisions were added. Four Armored Corps Headquarters were organized and a new branch of the Service created, that of the Schnell Truppen or Mobile Troops, which included all motorized or mechanized units in the Army.

DIFFERENTIATION

Let us pause now and see where this German Armored Force differed from the mechanized troops of France and England.

Where the French and British had created mechanized units these had taken the form either of reconnaissance forces or of tank battalions designed to support an infantry assault. These mechanized troops were widely scattered, designed to act as a part of larger ground forces. No attempt had been made at grouping them for command and no means were at hand for their employment as an Armored Force. In fact, it was not until the summer of 1939 that England commenced the organization of an Armored Division and not until February, 1940, that the first French Armored Division was organized. No attempt had been made prior to the War by either nation to provide for the mass employment of Armored Troops under a single command.

Germany, on the other hand, had already set up the organization for command of its armored units and during the summer of 1939, had conducted field tests of the employment of Armored Corps.

During the Polish campaign, Germany actually used two Corps with the Tenth Army, making the main effort from Silesia. Although under the Army Command these mechanized corps, once they were launched in combat, were given missions of exploitation deep behind the Polish lines, which practically gave them complete independence within their radius of action.

Following the Polish campaign, it appeared that the French and British policy of the defensive behind the Maginot Line had at last created that stalemate which the Germans feared. Dutch defenses in the north, the Belgian line behind the Meuse and the Albert Canal and the French Maginot line presented an almost continuous wall of fortifications across the western half of Europe.

As in 1918, the Germans were again faced with the necessity of piercing a defensive line to win a decisive victory. Again, as in 1918, a stalemate which could at best lead only to a compromise peace might prove an ultimate cause for defeat.

Although the new German Army had been primarily created for open warfare in Eastern Europe, the Polish campaign had demonstrated the effectiveness of German tactics and armament. As a result of the lessons of Poland the German General Staff conceived of the mass employment of their Armored Troops on the Western Front, as the final instrument of victory.

In the Battle of Flanders, which commenced with the German attack on May 10, the Germans again resorted to the tactics of 1918 at Cambrai, but this time on a vastly larger scale. Placing the center of gravity of their attack against the weakest part of the line at the junction of the French and Belgian defenses, just as in 1918, they had struck at the junction of the French and British forces, again the attack was characterized by surprise, violence, rapidity of execution, maneuver, and depth of penetration. But this time, the Germans had at hand an instrument by means of which they could prevent the re-establishment of equilibrium and carry initial success to complete victory.

As in 1918, they massed their best troops in the center of the attacking front. The Fourth Army, composed of ten Armored Divisions, was brought up into the forest of the Ardennes and launched through the gap caused by the collapse of the Ninth French Army. Thus the penetration in depth was achieved and the power of the attack carried far to the rear of the enemy's installations, with complete disruption of his communications and reserves and ultimate annihilation of his forces. The same tactics were again employed in the "Battle of France" which resulted in the final victory.

How profoundly this mission differs from the limited employment of Mechanized Cavalry as conceived by the French and British is now a matter of history, written on the battlefields of Poland, Flanders, and France.

AMERICAN CONCEPTION

With this conception of the mission of the Armored Force in mind, we can now return to a discussion of details of organization and weapons of our new armored divisions.

In the first place, profiting from the war in Europe, we commenced with the command set-up capable of mass employment of armored troops. The Armored Force and the I Armored Corps were first created, within whose organization all armored troops would be contained. Having created the Armored Force, a program of expansion has been adopted which will provide a powerful, independent instrument of war, equal to that of any other nation.

The American Armored Division, therefore, has not been created to fulfill an independent rôle within the command of a larger unit of other arms; but to act in conjunction with other armored divisions organized into Corps or even Armies, to fulfill a major tactical mission of the Armored Force.

Since the Armored Force, exclusive of G.H.Q. Battalions, must be independent of other arms within the scope of its own action, its units must be self-contained both for supply and combat, and since it is not designed to take limited objectives which will be immediately occupied by other troops, it must be capable of protecting itself during prolonged periods of action, far removed from supporting troops, until relieved by the main forces of the Army.

MISSIONS CLARIFIED

Keeping in mind the primary mission of an Armored Force, composed of Armored Corps and Divisions, the complete disintegration of enemy resistance, let us examine the mission of the Seventh Cavalry Brigade, its powers and limitations with respect to its own purely cavalry missions and then compare it with the organization and mission of the new armored division.

The mission of the 7th Cavalry Brigade was clearly stated in a directive issued by the War Department in 1931. Under this directive a mechanized mission was assigned to the Cavalry directing it to develop the organization and equipment of a Mechanized Force, so as to maintain its ability under modern conditions to perform its normal cavalry missions. Quoting from a lecture delivered by the then Brigadier General Van Voohris, "On favorable terrain, it was thought that mechanization should extend the sphere of action of Cavalry to much greater distances and increase the speed of performance of its missions without, however, altering the accepted fundamental missions of that arm."

Let us now turn to the "Tactical Principles for Cavalry" as published by the Academic Division of the Cavalry School in 1935, to discover what were the accepted fundamental missions of that arm. These missions are listed as follows:

- A. Reconnaissance
    - (1) Distant Reconnaissance
    - (2) Battle Reconnaissance
- B. Counterreconnaissance
- C. Security
    - (1) Covering concentrations
    - (2) Covering the movement of other forces
    - (3) Covering a flank during battle
- D. Offensive Combat
    - (1) Pursuit
    - (2) Exploitation of a breakthrough
- E. Defensive Combat
    - (1) Delaying action
- F. Special Operations
    - (1) Providing liaison between larger units
    - (2) Securing advance positions for less mobile forces
    - (3) The strategical advance guard
    - (4) Raids
    - (5) Minor warfare
    - (6) Attack and defense of a river line
    - (7) Convoys

The organization of the 7th Cavalry Brigade was admirably suited to perform these missions, but always as a part of a larger force, usually of other arms. For distant reconnaissance, its speed and radius of action enabled it to operate far in advance of horse cavalry and to sidestep enemy resistance, while the small arms fire power of its combat cars and machine gun troops made it a formidable weapon either for reconnaissance or counterreconnaissance to overcome hostile security or reconnaissance elements. In offensive combat for its missions of pursuit or exploitation of a breakthrough its fire power, speed, and shock action rendered it most effective against an enemy whose antitank defenses had been broken. In defense, its characteristics made it of value for delaying action.

Originally the 7th Cavalry Brigade had grown from one regiment of Cavalry Mechanized, which organically included its reconnaissance and security elements, to be a reënforced Brigade of two regiments. To accomplish its missions certain other elements were attached, consisting of a four battery regiment of field artillery, an air corps observation squadron, an ordnance company, a quartermaster company and a signal service detachment. Thus the brigade was enlarged to include elements of an armored division. It still had certain limitations, however, which rendered it unsuitable for the rôle of an armored division, as part of an Armored Force.

First, because of the light armor and armament of its combat cars, its shock element was powerless in the face of modern antitank defense, which normally will consist of mined areas covered by antitank weapons, of a great number of small but powerful antitank guns distributed in great depth in concealed positions, of a highly mobile reserve of antitank guns and finally, of tank units consisting of heavily armored tanks armed with 37-mm. or 75-mm. guns which will be employed in counterattack. In any deep penetration such defenses cannot altogether be avoided nor can they be overcome by the fire of artillery.

Therefore, medium tanks with armament capable of overcoming hostile antitank weapons must be added to furnish close support to the light tank elements in combat.

Again tanks cannot attack continuously without pause for reorganization and servicing. In the Armored Force, rally points will normally be far behind the hostile front while the vast trains carrying ammunition, fuel, and supplies must be protected on the march and in bivouac. In Poland, German Armored Divisions, complete with their trains, having passed through the Polish front, operated for days at a time entirely cut off from friendly troops.

ARMORED DIVISION ESSENTIALS

Therefore, the Armored Division must have its own infantry support element, to develop the enemy situation, to conserve the striking power of the tank mass, to occupy ground taken by the tanks and to secure the division in its rally positions, on the march and in bivouac. This infantry must have its own supporting weapons of artillery and antitank guns to enable it to accomplish its mission within the division.

The continuous advance of an armored force in hostile territory must be insured. A large engineer component capable of bridging any river which may be encountered and of assisting in the antitank defense is an essential element of the Armored Division.

In hostile territory reconnaissance is vital, not only to the front and flanks but, for an armored force, often to the rear as well. A strong reconnaissance element capable of self-sustained minor combat is another vital element of the Armored Division.

Ground reconnaissance must be extended by Air Reconnaissance often operating from advance landing fields within hostile territory in zone of action of the Armored Force. Combat aviation must also coöperate closely with armored units in the destruction of isolated enemy resistance and in extending the disrupting effect of armored troops operating in the hostile rear areas.

Adequate communications are vital to the successful employment of armored troops. So great is the area over which an armored force will operate, and so swift is the action of its units, that a large component of signal troops is required in the Armored Division.

Finally to enlarge its radius of action and to enable the Armored Division to be self-sustaining for several days even if cut off from sources of supply, the division trains have been enlarged and expanded.

These essential elements have, therefore, been incorporated in our new Armored Divisions, to include in addition to the two light tank regiments, a medium tank regiment, a reconnaissance battalion, an infantry regiment supported by a battalion of artillery in addition to the artillery regiment with the Tank Brigade, an engineer battalion, a signal company, an ordnance company and a medical and quartermaster battalion.

Tank War Experience . . .

CARDED

Before Warsaw*

WARSAW is a word which marks the termination of a fight without parallel. Warsaw means our (German) victory, and all that goes with it: A glad and joyous ringing of bells, thankfulness, pride and feeling of happiness; but also anxious care, gritting of teeth, self-sacrificing attacks without which such a decisive victory could not have been possible. Do you still remember when troops of the German army penetrated the enemy capital for the first time after the outbreak of the war? Do you remember when the whole world listened breathlessly as the first news came over the ether of that first powerful knocking at the gates of that city which had been held up as a symbol of the hoped-for destruction of the Third Reich? But do you know who the German soldiers were who, on September 8, 1939, after a week of uninterrupted marching and fighting, raised for the first time the flag of the Reich in the heart of the enemy territory and by so doing laid the foundation for the decisive battle fought in the bend of the Vistula?

On that evening when the radio brought the news of the penetration of German troops into Warsaw, the German people looked with pride and astonishment upon its tank corps, which had lately been created by the Fuehrer, and which could have given no better proof of its worth than it did by its advance against Warsaw. The sharp point of this steel arrow was the 4th Tank Division. It had been in existence only a year, yet had already been welded together by its renowned winter march in March, 1939, when as a very young division it moved over 1,000 kilometers (725 miles) through snow and ice in two and one-half days, passing over Alpine regions and the frontier mountains up to Iglau in Bohemia.

And this time? On the evening of September 6, the troops, out of breath, thirsty, and tired, fight their way to an open field opposite the enemy lines north of Petrikau. Here they secretly hope to snatch a few hours of rest and sleep in some humble shelter or on a haystack. Here they view one of the most terrible pictures of the war, so full of rich contrast. Nightfall comes on, compassionately veiling the signs of battle, but here and there the sounds of fight still may be heard. Clothed in thick clouds of dust, the tanks, artillery, wagons, infantry troop carriers, radio trucks, and supply vehicles—everything pertaining to the motorized column—move forward to their night's destination. It is almost dark when all of a sudden, as if at a secret signal, every village, farm, and straw pile, as far away as the eye can see, bursts into flames. Hissing and crackling, the fires leap heavenward. Showers of sparks shoot upward when a roof or a wall caves in. There is an acrid smell of burning materials. Thick smoke rolls in giant fantastic shapes over the night sky, forming a gloomy cloud mass that chokes the air. The atrocious Polish firebrands light these fires again and again during the night. They hope to hold up our advance.

Early the next day our tank division rolls inexorably forward through this land of waste. Twice on the 7th and 8th we break through the lines of the enemy, who defends himself desperately. Finally we break through for a rush of 100 kilometers (62.5 miles). Heedless of our right and left flanks, we roar northward, with only one thing in mind—*Warsaw*.

Late on the afternoon of September 8 the first German tanks and motorized riflemen penetrate the outer ring of the Polish capital. Through the deserted streets of the suburbs, past gloomy-looking houses, across railway lines torn up by German aerial bombs, and over torn-down trolley wires, run the combat vehicles, most of them flying the swastika flag.

Fire from the first barricades show us what the Poles mean by an "open city." Under these circumstances the occupation of the city must be deferred for the time being. Nightfall is already approaching.

A street scene during the fighting in the fortress in the City of Warsaw. Light tanks are to be observed in the left background.

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*From *Militärwissenschaftliche Rundschau,* March, 1940.

During the following night the division deploys on a wider front and makes ready for a coördinated attack. Early on September 9, after a brief artillery preparation, the attack on the city commences. Some parts of the division press forward as far as the railroad station. The fighting is stubborn and bitter, but the enemy defense is so strong and systematic that the attack cannot be carried farther by the tank division, which is not equipped for street and barricade fighting. From the roofs and cellars of the houses the Poles—soldiers and armed civilians, yes, even women and children—throw hand grenades and bombs upon the tanks standing before the barricades. In various stories of the houses certain windows are fitted up as combat positions. Everywhere behind gates and walls are machine guns, antitank guns, and field pieces, which meet the tanks and advancing German infantrymen with a rain of fire. Even from the east bank of the Vistula enemy batteries are firing and making considerable gaps in our troops advancing to attack from the southwest.

There is nothing to do but get out of the city. This one tank division alone is too weak to take possession of a strongly-fortified and well-defended city and hold it.

But, after all, was not our attack a great success? Eight days after the beginning of the war German tanks knock on the gates of the Polish capital with a powerful fist. They have surrounded the city from the south and west. In a great military success they have cut deep into the rear; and before the gates of the capital have severed the enemy communications leading to the west and southwest.

The division remains here for days, often fighting in several directions, and beats off sallies from the city as well as attacks from the west.

CARDED

British Tank Action in France★

THE Battalion left Ringwood for Southampton on 23rd May. The move was at an earlier date than those few in the know had expected, and was carried out at about three hours' notice. The Unit was rather scattered, one Squadron being six miles from headquarters, and men were dispersed getting in stores and equipment and on other "lawful occasions." We were, therefore, gratified that everyone entrained to time and that the journey of the road party was without incident.

Embarkation was carried out smoothly, in spite of the fact that much-needed equipment, which was still arriving when we were on the decks, had to be loaded on to vehicles as and when possible. On the morning of 23rd May men, tanks and transport began to land at Cherbourg, where we did rather more marching up the road and marching back again than was approved of by our mechanically-minded soldiers.

The original plan had provided for a period of training in France. This would have been particularly welcome and useful in view of the fact that there had been hardly any time to get acquainted with the new vehicles. However, it was not to be, and a somewhat leisurely program of departure from Cherbourg, over a period of several days, was accelerated owing to the situation created by the rapid German advance. We did entrain and go to the training area, but hardly had time to appreciate the good things left behind by the N.A.A.F.I. at the abandoned R.A.C. Depôt at Villeneuve en Chevrie, about half-way between Paris and Rouen, before we returned to the same station to entrain again for a destination known we believed only to the engine driver or possibly not even to him.

On the morning of 25th May we arrived at Neufchatel some 30 miles north-east of Rouen. Here we were met by an anxious C.O. and Adjutant, who had gone ahead. They had expected us many hours earlier and had hoped to get us away from the station during darkness. However, we got out and under way pretty quickly—again on foot. The step must have quickened to something like a light infantry one when we saw the state of some of the buildings near the railway station after a recent enemy bombing attack. The R.T.O. here seemed well used to air raids and to be positively disappointed when we got away without one. We afterwards learnt that it was probably only the presence of a specially provided fighter patrol from England that saved our skins. Tanks and transport followed later and by noon that day we, with another Battalion, which had been with or near us throughout, were harbored in a wood four miles north of Neufchatel.

Here we had hoped to have a little time to sort ourselves out, but were soon off again. "Move off in 10 minutes" or thereabouts became a very familiar order. We had expected to move north to a position of readiness near Blangy 15 miles south-west of Abbeville and the harbor had been reconnoitered. However, when the harbor party returned they found the Battalion moving off prepared for action against large numbers of Germans reported in the new harbor area. Having just returned from it they could hardly believe their ears, but concluded that the enemy must have moved with even more than his customary rapidity.

During the night of 25th May we moved up towards the River Bresle with the other Battalion on our left for what we expected to be our first action with the enemy. The two Battalions covered a front of about 15 miles. The rain came down in torrents and "a most unpleasant night was spent by all," but we saw no sign of the enemy. We experienced for the first, but by no means the last time the difficulty of detailed map reading with a map of

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★From *The Tank*.

scale approximately ¼-in. to 1 mile, which was all we had. Fortunately the French had not taken down the signposts or we might still be wandering about France. About this time "B" Echelon moved back to a forest some 20 miles south-west, where they were bombed, but happily without effect.

Orders for a farther advance to the River Somme were soon received, and about 4 AM on 27th May we were approaching that river still on a wide front and with the Nth Battalion on our left. The rôle given to us was to clear the area, which was believed to contain only small parties of the enemy. We were told that French troops would work in close coöperation with us and would take advantage of our advance to occupy up to the river and in some cases hold ground on the other side to cover the bridges.

The sector for which we were responsible was from exclusive Abbeville on the right to Cahon, seven miles down the river, on the left. Our task was really one for infantry tanks, but without artillery support.

The Battalion advanced "two up," with A Squadron on the right, C Squadron on the left and B in reserve. When about four miles from the river things began to happen. Battalion H.Q. was shelled, and the writer has unpleasant memories of what seemed a very long period of wondering where the next one would land. A Squadron met with very bad going and considerable opposition, and the last that was heard from the Squadron Commander, Major Rumsey, was his very clear and concise wireless orders for a final attack on the enemy position near Moyenville. This Squadron suffered heavy casualties in men and tanks in the action, and it became evident that the enemy held an extensive bridgehead in front of Abbeville.

On the left C Squadron met with no opposition, except for some shelling. They were, however, delayed by a road block at Miannay, close to the river. Later in the morning two light tanks of Battalion Headquarters got round the block and entered the village. They left the block itself severely alone, a precaution which was found to be justified when an officer and several men were wounded by explosions when removing other blocks—this even though ropes were used.

As a result of these operations it was found that the Battalion area was clear except for the Abbeville bridgehead mentioned. The information was conveyed to the French troops. Unfortunately, however, they did not occupy the ground gained. In the evening the Battalion received orders to concentrate at Chepi and Aigneville about eight miles south-west of the river, leaving B Squadron in observation on the line reached. At Chepi a low-flying German plane was brought down by a Bren gun fired by Cpl. Draper from a light tank.

Casualties in the Moyenville action were:

Killed: Lieut. Ewart, Sgt. Pearson, Cpl. Craig, Tprs. Barker, Coe, Davidson, Harvey, Perry and Wauters.

Wounded: 2d Lieut. Barker, 2d Lieut. Powell, Tprs. Harries, Polock, Rothery and Westhorpe.

Missing: Major Rumsey, Capt. Daniell,* Sgt. Green, Cpls. Ball* and Reeve, Tprs. Carlin,* Joyce, Smith,* Taylor and Wyeth.

*Since heard of as prisoners of war.

On the 28th the fighting portion of the Battalion with its remaining tanks was concentrated at Aigneville after a period of six days and nights of almost continuous movement, culminating in the action on the Somme. During this time there had been practically no opportunity for sleep, rest or maintenance.

Here we made our first contact since 25th May with our fitters and B Echelon, and much good work was done by them in repairing and salving tanks and feeding the crews. We spent several days at this place, but in spite of many alarms and one enemy plane passing over our headquarters at about 50 feet we were not bombed. We began to think that perhaps our air precautions were improving.

The rest of our stay in France was a period of almost continuous movement, punctuated by a number of clashes with enemy tanks, in which we came to the conclusion that there was nothing wonderful about them or their crews but their numbers.

Near Dompierre, some 30 miles west of Rouen, a patrol of B Squadron was in action with a superior force of German tanks and suffered casualties. 2d Lieut. Barker was in command. He had only that day returned from hospital after a previous wound and immediately taken over his Troop. Here he received further wounds, from which he afterwards died. Tpr. James was wounded and two tanks lost.

On the 8th June we were in position near the River Andelle 20 miles east of Rouen with patrols on that river, when they were attacked by strong enemy forces. The writer, with two light tanks, has vivid recollections of being fired on by some thirty heavier enemy tanks supported by lorried infantry, while the village he was in was bombed with great thoroughness from the air. It seemed hardly fair. About noon on that day the Battalion was ordered to concentrate and in the evening we crossed the Seine near Gaillon. Here a Troop under Capt. Carey-Thomas had a successful shoot against enemy tanks, the French estimating that about six were knocked out.

Most of us must have thought as we crossed the Seine that surely here energetic resistance would be offered, but the enemy advance was not checked. On 10th June, after a march of 100 miles, we were in a forest near Alencon. By this time we could muster tanks for one Squadron only, and C Squadron, made up from the others and commanded by Major Brown, joined a composite battalion under Brigadier Crocker. This Unit moved up north again to try and close a gap in the French Forces, and took part in several minor actions, in one of which 2d Lieut. Bell's Troop came under heavy antitank fire. He and his driver, L/Cpl. Dudbridge, were reported missing and one tank was lost. On the night of 14th June orders were received for another hurried move, which, although we did not know it at the time, was part of the general evacuation of British Forces to England. On the night of 16th June, after a march of 300 miles, we arrived at Brest and embarked early the next morning.

We must take off our hats to the Bretons who, although we were going back, made our progress through Brittany something of a triumphant journey and cheered us through every village. Our M.O. was seen to halt among inhabitants so friendly and so good-looking that we did not expect him to leave the country. However, he was with us when we landed at Plymouth on the morning of 17th June. We had been very anxious about the fate of our C Squadron, but later found that it embarked with Brigadier Crocker's Force at Cherbourg, arriving at Southampton on the 18th.

The above brief outline is intended as a necessary background to the personal accounts of various incidents which follow, and which, it is thought, will be of much greater interest.

ACCOUNT BY CAPT. P. R. C. HOBART OF PATROL ACTION, JUNE, 1940

This is the story of a patrol action which took place between four light tanks and German AT guns and infantry when the Germans broke through south of the Seine during the closing phase of the campaign in France.

It is not a very exciting story to read, although it seemed quite exciting enough at the time. It may serve, however, to bring out one or two elementary principles of tank tactics.

2d Lieut. Bell took his troop of light tanks out on patrol one sunny afternoon. He was accompanied by a Captain, also in a light tank, who was to have a look around wherever the spirit moved him.

The patrol pursued its way along its appointed route without incident until a certain cross roads was reached. After passing this, machine gun and rifle fire was encountered from a spot straight ahead down the road in front, possibly five or six hundred yards from the cross roads. The tanks turned about and returned to the cross roads, and after a short discussion it was decided that the Troop should run down and finish off the machine gun post and a few of the infantry, and then return to the cross roads and continue the patrol, meanwhile the Captain was to investigate movements reported down one of the other roads.

The subaltern then started off towards the machine gun post leading his Troop, and the Captain departed on his lawful occasions. When the subaltern was about half-way to the machine gun post, antitank guns opened fire, and for some unknown reason he ordered his tank to halt. As the tank halted the first shot crashed through the front, wounding the driver in the legs. This was followed by another direct hit, which again hit the driver, and yet a third, which hit the mantlet of the guns and burst the water jacket of the Vickers.

The tank was now immobilized and under rifle and machine gun fire. The driver's body blocked the entrance to the driver's seat from the fighting chamber, as after the second shell had hit him he had tried to climb back out of the seat. The gunner was then ordered to get out and try to enter the driver's seat from the front. Finding the front visor locked from the inside he was unable to do this, and he was ordered by the tank commander to get back to the cross roads and to bring help.

Meanwhile the Captain, having heard that something was wrong, came back to the cross roads, where he found the other two tanks of the subaltern's Troop. On finding out what had happened he signalled the Troop Sergeant to follow him and started off down the road towards the disabled tank. Immediately the two tanks showed themselves heavy AT fire opened up from three or four AT guns and the Troop Sergeant's tank was hit and immobilized. The Captain, however, did not know this and, thinking he was still being followed, he continued down the road. After travelling a few hundred yards down the road he saw the gunner of the disabled tank behind a tree with his revolver drawn. He stopped, questioned the gunner and continued his advance, zig-zagging down the road and going at full speed. Then at last the antitank guns registered their first hit, which carried away the offside jockey roller and bracket complete, but mercifully did not break the track.

It was now possible to get off the road, which was getting a bit too hot to be pleasant, so he turned left over a ditch and a bank and continued to run parallel to the road, firing at the flashes of the AT guns between the poplars which lined the road. After travelling forward a few hundred yards in this way a wood barred further progress, so he turned right, crossed the road and the ditch and the bank on the far side to try and attack from that flank. AT fire was still heavy and it was extremely difficult to pick up the guns or to get any telling fire on them.

On this flank another wood barred the way round to the flank of the guns, so the tank went on as far as it could, turned about and returned to the road once more and back to the cross roads—zig-zagging and moving flat out with the guns still flashing behind it.

On reaching the cross roads the AT fire ceased and the Captain found the Sergeant's tank, which had managed to crawl back under cover after having been hit, and had been firing at one of the antitank guns from there. The Sergeant thinks that he managed to knock out this gun.

These two tanks then decided to try the right flank again and see if they could find a way through the wood. This was done, but no approach could be found, so after returning to the cross roads once more and firing off a belt in the direction of the guns, the two tanks retired to rejoin the Squadron.

The fate of the subaltern and his driver remains unknown.

An unsuccessful and rather disappointing action, which does, however, serve to bring out two lessons:

Firstly, keep moving: go like a bat out of hell and change direction if you want to avoid being hit.

Secondly, AT guns can be expected with the very foremost German soldier.

CARDED

Encounters by Horsemen in the West

Translated from *Deutsche Kavallerie-Zeitung*

THE wind is howling across the snow covered borderland. We are passing over a lonesome highway which, winding its way over a snowy white, hilly region dotted here and there with somber woods, disappears over the cheerless wintry horizon.

Raising tufts of powdered snow a few horsemen are approaching at a rapid trot under the trees on both sides of the highway. While no lancer banderoles are fluttering gaily in the wind, nevertheless they seem to be surrounded by the aura of the old, yet ever young, romance of knighthood. So long as we have wars, we will have horsemen, horses, and the knightly spirit. Saddles squeak, horses show off, and now and then steel clinks against steel; the time-honored melody of chivalry. With faces reddened by frost and from under the sharp visors of gray helmets, shining eyes are peering into the white distance. The boyish lieutenant at the head raises his hand. The horsemen check their mounts and come to a halt. The lieutenant lays a map case on the pommel. After a hasty glance at the map, he thrusts his arm up several times. The horsemen trot out, leave the highway, and obliquely crossing a field, they disappear in a nearby grove.

At the edge of the woods, concealed by a few dwarfed oaks with brilliant (fall) foliage, the lieutenant scans the map and discusses the situation with a few noncommissioned officers. The party is on a scouting exercise. Individual outposts are posted near the edge of the woods and, farther ahead at a crossroad behind a haystack.

"Get ready," "To horse," and "Mount" ring the snappy commands. The horsemen mount and, leaving the grove, ride forward on the highway.

They come to a narrow bridge where a heavy truck had skidded and had sunk its rear axle deep into a snow drift. Behind it a long column of heavy trucks was jammed into a mess. Truck drivers and their helpers, their faces dripping with perspiration, are toiling with shovels to free the vehicle. The lieutenant turns to me and laughingly remarks:

"What is missing here is some hostile attack, and the fat would be in the fire. Then we'd hear again: 'Horsemen to the front.' "

In astonishment I ask, "What have horsemen to do with a stalled truck column?"

"Sometimes a good deal," replies the matter of fact lieutenant.

In return I ask: "Has anything similar ever happened to you before?"

The lieutenant narrated: "Pay attention comrade. It happened at the Brahe in Poland. We had come to rest in a forest bordering a highway leading toward the Brahe. Our horses had been unsaddled, and were chewing away from their feedbags. The poor nags needed it. We were taking it easy, eating our rations and smoking. On the highway much activity was in progress. Columns of heavy trucks were rumbling over it. Artillery growled in the distance. Partly interested and partly indifferent our weary eyes observed the motoring comrades. Suddenly the towing truck of panzer trailers stalled.

"Nothing good in the offing. We sniffed it in the air. Tenseness! Rifle fire crashed at the front. Without orders my men fell to with blankets, saddles and carbines. The horses prick their ears. A mud bespattered truck director bursts into our camp causing the horses to rear. He shouts the commands: 'Get Ready!' and 'To Horse!' It was hardly necessary as the horses had already been saddled and were champing at the bit. 'Mount!' and 'Gallop March!' We followed our leader who pointed out the direction with his drawn sword. Right through the stalled and jammed up column of trucks.

"No other branch of the service could have worked its way over the cluttered, and choked up road as quickly as we did. In line and virtually at a 'charge' we rushed through the narrow gaps between the jammed vehicles.

"Ahead flashed the water of the Brahe. Beyond it we could see the Poles fighting from behind embankments. In a surprise attack they had fallen on the column of trailers which really had no defending personnel. Behind the rear vehicles we stopped our mounts, hopped off, and our horse leaders took them back under cover. The squadron found protection along the Brahe and at the bridge, and with carbine and machine guns we poured a well directed fire on the Poles. That was more than these fellows expected. Their resistance was soon overcome, and under our protective fire the column was enabled to straighten out by unraveling the jams on the bridge and on the highway and, later, to continue its march to the front.

"Once again the horse helped the motor out of a dilemma (mess), and the horsemen demonstrated their needfulness and resourcefulness in the motorized war of modern time."

—KLAUS GUNDELACH (from *Voelk. Beobachter)*.

Editorial Comment

Cavalry Opportunity

A prolonged yearning of all cavalrymen is about to materialize. Our enlisted ranks, which for so long have contained numerous "blank" files, are being filled with flesh-and-blood recruits as units are brought to full strength. Those "third" platoons, long represented in maneuver areas by a "man on a horse with a flag" are being activated into reality. Soon, there will be an influx of trainees, presented to the Army of the United States by the Selective Service Act.

What of these impressionable young men? Here is our great opportunity; we must make the most of it. These men will come to us from all walks of life—good, bad and indifferent; of varying scales of education and background. Some will lend themselves readily to training and discipline; others will inwardly rebel. They, all, must be moulded promptly into an effective fighting element—*and like it*—be enthusiastic about our cavalry service. HOW? *By intelligent, considerate and just treatment of them; by superior, interesting, objective and progressive instruction.* We should not try to "sell" the cavalry by "babying" these men or by lowering standards of discipline;* on the other hand, initially they will be physically soft and mentally apprehensive—it is something new for them. We must use tact! We must see the "big picture"!

Perfunctory instruction (and injustice) destroys morale; conversely, enthusiasm begets enthusiasm! These men must return to civil life as a national defense asset, with faith in the cavalry service, and in the army at large; with a firm conviction that this period of cavalry instruction has materially benefitted them personally. Having been such cavalrymen, they always will be cavalrymen, at heart. Anything less will be an indication of failure on our part. This is a serious challenge! It similarly involves EVERY member of our military and naval establishments.

During the World War I, a few isolated unfortunate incidents, to which the Press gave considerable publicity, caused numerous civilians to become prejudiced against the Army in general. In a large establishment, civil or military, we should always expect to find a few blundering individuals. In our Army, these must be reduced to the humanly possible minimum.

Cavalry is a man's arm of the service, with plenty of hard work in the care of animals, weapons, and vehicles; but men do not mind hard work when it is objective, and they can see results. Our diversified training requires stamina and physical courage in its accomplishment. The very nature of cavalry training inculcates efficiency, initiative, audacity, zeal, daring, enterprise and leadership—and an immediate coördination of mind and muscle. It is adventuresome and thrilling. Cavalry achievement stimulates *esprit-de-corps,* camaraderie, and inspires a man to polish his cavalry insignia—to be proud of his outfit.

We have an ample cadre of capable cavalry instructors, both noncommissioned and commissioned officers. They should be selected with meticulous care for this all important task. Our mission is clear—*TRAIN FOR BATTLE, in modern mobile warfare.*

This is our goal—our great cavalry opportunity.

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*See Page 405, September-October issue of The CAVALRY JOURNAL for a good definition of discipline.

Gas!!!

In the present European war lethal gas has been conspicuous by its absence. Yet, unfortunately, its use still is within the realm of possibility. Its main value is in surprise action. Training in antigas measures, therefore, should be stressed continually—for animals as well as for personnel. The responsibility for the use of gas which its initiation will produce, with its horrible aftermath, is a serious decision. It is problematical, therefore, as to how long in this war, through fear of retribution and civilized condemnation, the non-employment of dreaded gas will continue.

World War I proved conclusively that a force or nation when invaded or when facing defeat, invariably, in panic will resort to *any means* to further its objective.

Total War implies the force of arms, strife, brutality, and hostility in every detail. The *gauntlet* is accepted; and even though one may burnish it with glamour and refine it with the "Rules of Land Warfare," when an enemy invades the sanctity of one's homeland—which in itself is a violation of the Rules of Land Warfare—or when two opposing nations, armies, or patrols, in war clash in mortal combat, it ceases to be a military maneuver. It is a man-to-man struggle for self-preservation—a Battle Royal in which the only referee is one's conscience, then numbed by the specter of death. War is Ghastly!

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National Guard Items

The 56th Cavalry Brigade, of approximately 1,377 officers and enlisted men, is now in Federal Service. Its unit training center will be at Forts Clark, McIntosh, Ringgold and Brown in Texas after February 1, 1941, but will have its staging area (temporary training area) at Fort Bliss, Texas, until February 1, 1941. When it relieves units of the 1st Cavalry Division of the Regular army at Forts Clark, McIntosh, Ringgold and Brown the Regular army units will be concentrated at Fort Bliss, Texas.

The 106th Cav. (h-mecz.), Illinois in Federal Service is stationed at Camp Beauregard, La., Area 6.

The following units are *tentatively* scheduled for induction on or about January 3, 1941:

101st Cav. (h-mecz.), N. Y. at Fort Devens, Mass.
102d Cav. (h-mecz), N. J. at Fort Jackson, S. C.
104th Cav. (h-mecz), Pa. at Indiantown Gap, Pa.
107th Cav. (h-mecz), Ohio at Camp Peay, Tullahoma, Tenn.
113th Cav. (h-mecz), Iowa at Brownwood, Texas.
115th Cav. (h-mecz), Wyo. at Fort Lewis, Wash.

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Erratum

On Page 416, September-October issue, reference typographical error, "The 5th Cavalry Brigade, Texas, composed of the 112th and 124th Cavalry Regiments, will remain horse cavalry"—should have read "The 56th Cavalry Brigade," etc.

A Cavalry Song

Marching songs often have carried soldiers to their military objectives with greater dispatch than their weapons. "Dixie," "Yankee Doodle," "Tipperary," "Over There," etc., etc.

"A singing army is a fighting army," said Major General Bell in the World War.

An army song-book is now being prepared by the Morale Division in the Adjutant General's Office to assist our soldiers of 1940-41 in perpetuating the army's long tradition of song. Mass singing will be encouraged as an effective means of stimulating morale and *esprit de corps.*

At present, we do not have a cavalry song, which properly expresses cavalry—one with a swing and punch to it that troopers like and can easily sing.

It would seem that our splendid cavalry bands could do something about this.

For example, this is good, but not quite IT.

Cavalry Song

(Music, "The Riff Song")

Ride! Sing as we go, into battle
Ride! Hear our "tack," machine guns rattle
Ride! It means the cavalry's might
Thunders on for honor and right.
Ride! Scorn all danger, take all barriers
Ride! Horses, men, alike are warriors
Ride! Our pride, our glory will be
Our loyalty all to thee
The Cavalry!

* * *

3d Cavalry to Full Strength

The War Department has announced another step in building the country's cavalry force up to effective strength. The famous 3d Cavalry, "Washington's Own," at Fort Myer, Virginia, will receive an impressive increase in personnel in the near future. The men involved in this increase will come from selective service trainees from states of the Third Corps Area, which comprises Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and the District of Columbia.

At present the strength of the 3d Cavalry is 659 enlisted men. The new strength of the regiment will be 1,342 enlisted men. The 683 men required to bring this unit up to its new strength will be in two increments. The first group of 254 men from selectees brought into the service found themselves "troopers" of the 3d Cavalry on November 18, 1940. The remaining increment of 429 men will be received on February 10, 1941.

With its increased strength, this regiment will be organized as a nine-troop unit. At present it consists only of six troops, which are a headquarters and service troop, a machine gun troop and four rifle troops. The three new units to be created will comprise two additional rifle troops and a special weapons troop. The latter organization is made up of .50 caliber machine guns and 81-mm. mortars.

The Big Picture

The War Department has made the following *tentative* announcement:

Grouping of divisions and corps in large tactical units for training and tactical supervision, indicated as follows:

Armies	*Corps*	*Divisions*
First	I	8th, 9th and 30th.
First	II	28th, 29th and 44th.
Fourth	III	7th and 40th.
Third	IV	4th, 31st and 43d.
Third	V	32d, 34th, 37th and 38th.
First	VI	1st and 26th.
Second	VII	27th, 33d and 35th.
Third	VIII	2d, 36th and 45th.
Fourth	IX	3d and 41st.
Second	——	5th and 6th; *2d Cavalry Division (when activated)*.
Third	——	*1st Cavalry Division and 56th Cavalry Brigade.*

Note. For units of the National Guard, control will remain under the appropriate Corps Area commander until induction processes have been completed and units have arrived at Unit Training Centers.

* * *

Corps headquarters, under present plans, will be activated as follows:

Headquarters	*Station (Note 1)*	*Date of Activation*
I Corps	Columbia, S. C.	At once
* II Corps	Fort Geo. G. Meade, Md.	Jan. 3, 1941
III Corps	Presidio of Monterey, Cal.	Jan. 3, 1941
* IV Corps	Camp Blanding, Fla.	Nov. 25, 1940
V Corps	Camp Beauregard, La.	At once
* VI Corps	Fort Devens, Mass.	Jan. 3, 1941
VII Corps	Fort McClellan, Ala.	Nov. 25, 1940
VIII Corps	Brownwood, Tex. (Note 2)	At once
* IX Corps	Fort Lewis, Wash.	At once

*Headquarters detachments and headquarters companies now wholly or partly active.

Note 1. To be located, as selected by the Corps Commander, in the general vicinity of the station shown, but preferably not on the military reservation.

Note 2. To be organized at Fort Sam Houston, Texas; will be moved to Brownwood, Texas, at a later date.

* * *

Insignia

When the National Guard is inducted into the Federal Service, officers and enlisted men, respectively, will wear the "U. S." collar insignia prescribed for officers and enlisted men of the Regular Army.

—Circular 113, W. D. October 11, 1940.

Encephalo

Outbreaks of sleeping sickness of horses have been fewer this year than any year since 1936, according to reports received by the U. S. Department of Agriculture from its veterinary inspectors and coöperators. This disease, known scientifically as *infectious equine encephalomyelitis,*—"encephalo," for short—has thus far affected only about 4,500 horses this year, most of which were in the Midwestern States.

During the 1939 season there were about 8,000 cases; in the previous year about 184,000 cases were reported. In these years, 1938 and 1939, the disease was fairly widely distributed throughout the country. The corresponding figures for 1936 and 1937 were 3,929 and 173,889 respectively.

* * *

Saluting

For changes in AR 600-25, see Circular 114, W. D. October 14, 1940.

* * *

More About Business

On the back cover of this issue is a plea to all members of the Cavalry Association to utilize the "yellow expiration notices" for forwarding remittance of dues in the Association and renewing subscription to The CAVALRY JOURNAL. All members whose subscriptions expire with the November-December issue will find such a notice inclosed with this journal. By returning this notice with your check as soon as convenient, the proper credit can be made on your account, the clerical office work required for handling accounts will be more equalized, and a considerable amount of both time and money can be transferred from necessary routine end-of-the-month billing to other fields of journal activity more beneficial to the individual subscriber.

To allow additional time for receipt of renewal checks memberships in the Association that have previously expired as of December 31st have been changed on our records to show expiration as of January 31st. No issue of the JOURNAL is published between these dates.

Please don't wait for a bill to send in your renewal. Mail the "yellow slip" today, and help us save $300.00 on postage to apply toward a better JOURNAL!

* * *

Chin Strap Buckle

Query: On which cheek should the buckle of the chin strap rest?

Reply: It is true that this item is not included in the War Department regulations, "Wearing of the Uniform," but it is believed logical that **the buckle should rest on the left cheek** so as not to bother the soldier when firing his rifle with his right cheek pressed close to the rifle stock.

* * *

Send a screed to your CAVALRY JOURNAL—deadline, next issue, January 10th. **Spark up, Cavalrymen!**

Remember These Facts?

DURING the present period of army expansion and transition, we should not lose sight of the important consideration that over 100 foreign cavalry divisions were on occasion effectively employed in World War I. Each division averaged approximately 7,000 men. The following identifications were made of cavalry divisions: Austrian, 10; Belgian, 2; British, 7; Bulgarian, 2; French, 10; German, 11; Italian, 4; Rumanian, 2; Russian, 54; and Serbian, 1; a total of *103 cavalry divisions.*

In addition, there were numerous independent brigades and regiments, not forming parts of divisions but which were employed as division and corps cavalry. France and Germany alone had more than 600 squadrons; the French squadron or *escadron* is the equivalent in numerical strength to our cavalry troop. Besides these, there were numerous irregular cavalry and other mounted troops of the various nations.

The Armistice, November 11, 1918, found both French and British horse cavalry on the Western Front from ten to twenty miles in advance of their main forces, in pursuit of the retiring disorganized Germans.

After the United States entered the World War, except for a regiment of United States infantry in Italy and a small force in Russia, all of our great army was employed in France on the then stabilized Western Front, which obviously afforded little opportunity for cavalry combat *en masse.* The cry then was for aviators, ammunition and machine gun and artillery units. Only four of our cavalry regiments, consequently, were sent abroad, in the order named: the 3rd, 2nd, 6th, and 15th Regiments. All were without their horses. The 3rd Cavalry helped establish the Remount Service of the A.E.F. Detachments of the 2nd Cavalry, hastily supplied with foreign mounts, participated in the following battles in France: Toul Sector; Aisne-Marne Offensive; St. Mihiel Offensive; and the Meuse-Argonne Offensive. Their work consisted largely of patrolling, military police, reconnaissance, liaison, remount work, and miscellaneous duties. The 6th and 15th Cavalry Regiments were engaged either in remount work or in military police duty. The regiments remaining at home were distributed principally along our southern frontier. The 1st to the 17th Regiments, inclusive, were horse cavalry. The 18th to the 25th Regiments, inclusive, were organized in 1917 as horse cavalry and later reorganized as Field Artillery regiments.

For us in America, the World War conveyed but a single picture—that of the bitter trench-to-trench struggle along that line which stretched without a gap from the British Channel to the Swiss Alps; great battles of brute force and attrition; a struggle marked by destructive artillery duels, by the horrors of gas and the bitterest discomfort. The inevitable result was that no branch of the Army of the United States of America came out of the World War so unjustly undervalued as was our cavalry.

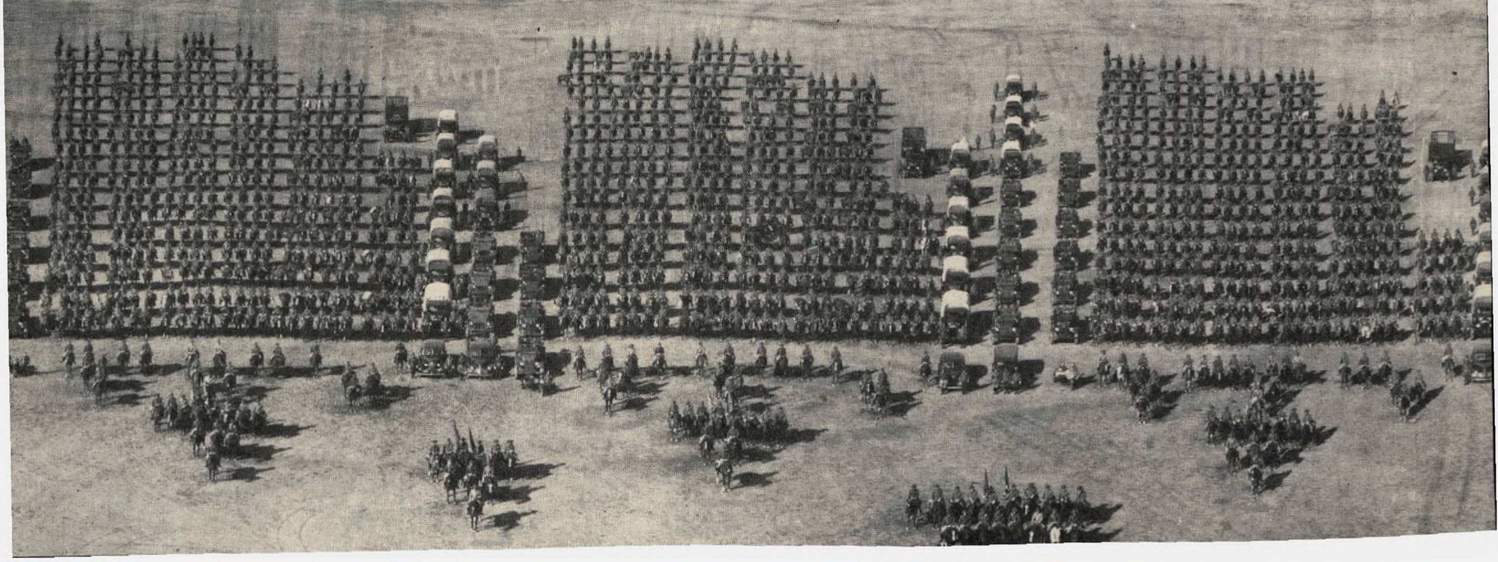
Today, of the fourteen active cavalry regiments in our Regular Army and the 26th Cavalry (Philippine Scouts), the 1st and 13th Regiments—called Armored Regiments (Light)—are completely mechanized and are elements of the 1st Armored Corps. The 4th and 6th Regiments have been reorganized as Horse-mechanized Regiments (Corps Reconnaissance Regiments); and are assigned to the VIII and IV Corps, respectively.

When one emphasizes the capabilities of horse cavalry, it should not in any sense be construed as discrediting the effectiveness of our newly created Armored Force. On the contrary, we are definitely in favor of the Armored Force. Mechanized cavalry is an extension of horse cavalry. Neither can replace the other. Each complements the other. At present, 120 cavalry officers are assigned to our Armored Force in prominent command positions. We, obviously, speak the same language. It is not a question now of horse *vs* motor, but horse *plus* motor—plus mule—plus wheels and tracks—*plus everything which will help us accomplish cavalry missions.* We need more cavalry of all types.

The 15th Cavalry, organized in 1901, and the 16th and 17th Cavalry organized in 1916, were made inactive in 1921; and are *at present carried as inactive cavalry regiments.* It is hoped therefore that with our army expansion, these three regiments, with historical background, *soon will be activated to complete our cavalry divisional and corps organization in fact.*

WHY NOT ACTIVATE—

15th Cavalry? **16th Cavalry?** **17th Cavalry?**



Rough going—where horse cavalry is dominant!

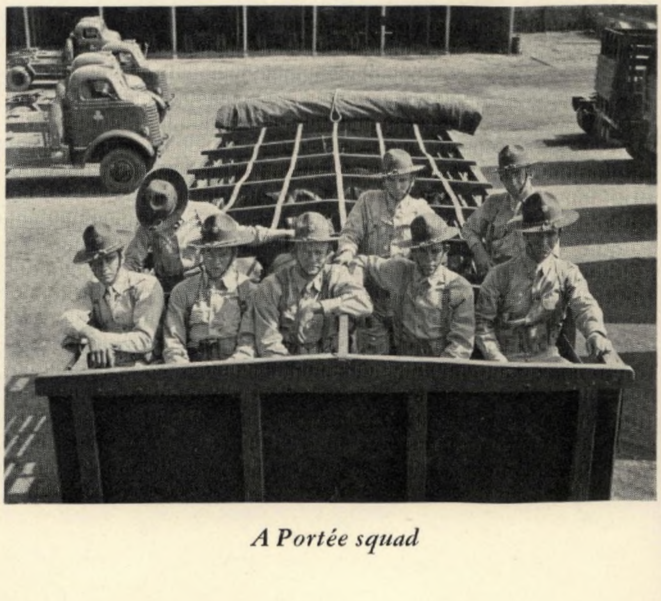
CARDED

War Horse

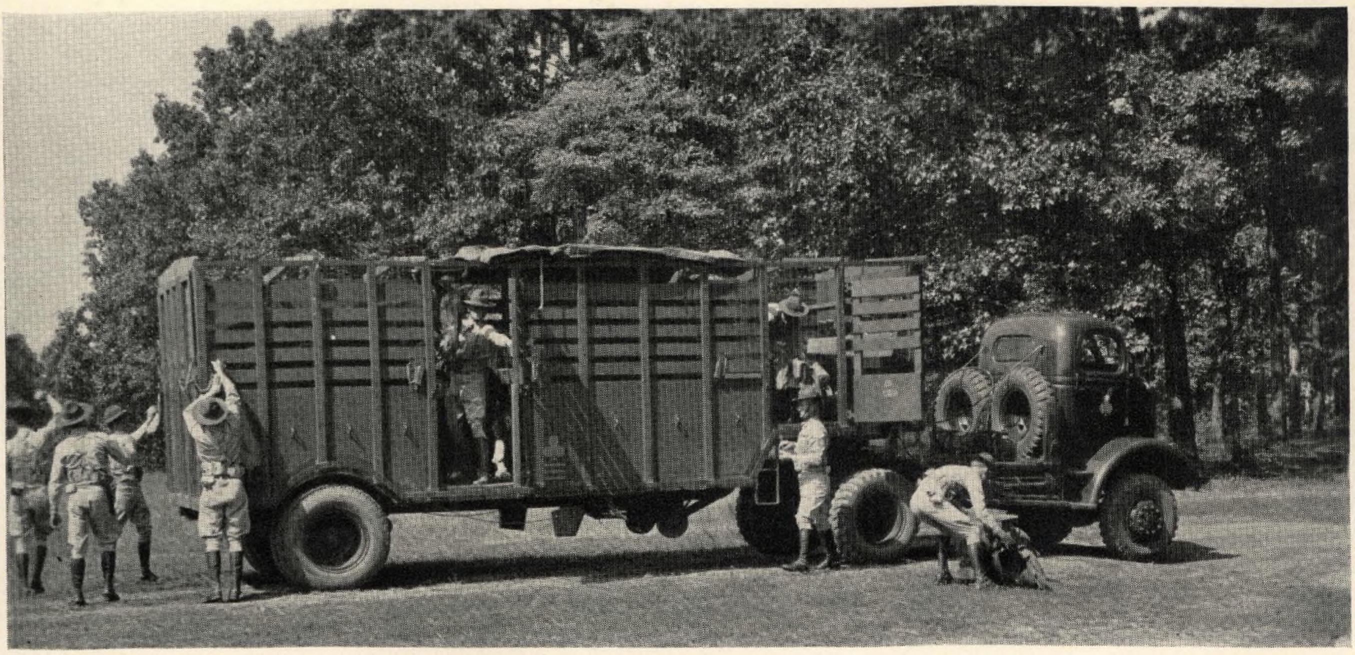
IT is extremely gratifying and reassuring for our mounted services to note the present trend of public opinion relative to the horse in war—as indicated in the October 19th issue of the *Army and Navy Journal:* "Editors Hail Expansion of Regular Cavalry, Cite Usefulness of Horses."

For a number of years, in the United States, there obviously has been an organized propaganda discrediting animals in favor of the motor for commercial purposes. With this objective, we emphatically are in agreement. The horse has little place in modern commercial and economic life. We wish that this were true of modern warfare. We wish, also, that both men and dumb beasts could be eliminated from the prosecution of war, in favor of mechanical automatons; or better still, that war could be entirely banished from civilization. Since this, as yet, does not seem to be possible, from a purely military viewpoint we must consider it materialistically. Highway and rail arterial lines of communication, now, are tactical as well as strategical objectives. In France, last May, those highways in the theater of operations which had not been destroyed were so completely clogged by refugees that all motor movement towards the Front was brought to an absolute halt, contributing to the defeat of the French armies. With the presence of the Fifth Column activity, this condition should have been anticipated. It was anticipated by Germany and probably was a planned consequence. The fact remains, however, that it did happen and combat horse elements, capable of detouring the congested areas by cross country maneuver, were not then immediately available.

Let us for a moment, turn back the pages to World War I and consider our war horse—From the time the American Expeditionary Forces landed in France in June, 1917, to June 28, 1919, a period of two years, the Remount Service expanded from one officer and clerk to an organization of 493 officers and 14,598 enlisted men; this number was on duty January 1, 1919. During the life of the A.E.F., 243,360 animals, all types, were procured from the United States, France, England and Spain. A fruitless search for animals extended in the summer of 1918, to Portugal and Morocco. For camparison: of the grand total of animals received, 32,196 were riding horses and 149,787 were draft horses— a total of 181,983 horses;



A Portée squad



Portée equipment

nearly three horses for every mule received; and the World War, from the American viewpoint, was not a "cavalry war." Despite the distance of the United States from the battlefields of France, 67,725 animals were shipped across the Atlantic for the A.E.F., alone. Even so, on Armistice Day, the A.E.F. was short of actual requirement, 163,382 animals.

During the World War, our Allies bought in this country nearly one and one-third million horses and mules. The United States Army during 1917 and 1918 purchased for its own use nearly 500,000 animals, of which 160,000 were mules. In September, 1918, General Pershing requested that 14,700 wheel mules be transported overseas monthly.

The following average prices paid per animal by classes for the A.E.F. may be of comparative interest:

	Mules		*Horses*		
	Draft	*Pack*	*Cavalry or riding*	*Light Art.*	*Heavy Art.*
French	$404.17	$278.98	$326.19	$371.34	$454.98
British	390.42	342.58	409.55	443.04	471.74
Spanish	462.10	339.43	401.20	433.50	
U. S.	207.59	164.22	155.84	186.37	240.01

General average per animal by class based on 78,000 animals:

Mules		*Horses*		
Draft	*Pack*	*Cavalry or riding*	*Light Art.*	*Heavy Art.*
$296.70	$288.72	$270.32	$341.16	$375.18

The average cost per animal in the U. S. was $196.39. The estimated average cost of same animal upon delivery to a unit in France was $461.63.

The average Government cost per animal in the U. S., fiscal year ended June 30, 1940, was $164.80.*

Utilizing war horses is not solely for the purpose of practical economy. They serve a definite military purpose. Our War Department is fully aware that horse cavalry, by actual demonstration, still possesses battlefield maneuverability over rugged terrain yet unequaled by any other service. This coupled with the tremendous fire power which we have in our American cavalry today, produces a composite weapon essential in modern military operations, particularly in probable geographic areas such as are found in the Western Hemisphere.

It is emphasized that horses and motors complement each other. They are not in competition. Neither can replace the other in warfare. Both are necessary!

In this age of mechanization and motorization we should remember that the Germans are reliably reported to have utilized 791,100 horses (not including supply columns) in their invasion of the Low Countries and France, where the road and highway nets were declared as superior to anything which we have in the Western Hemisphere except in our coastal regions and isolated inland metropolitan areas.

We recently have developed a system of portéeing horse cavalry great distances at high speed. This has opened a new field of effectiveness in the utilization of horses. Similarly for the foot soldier, it eliminates the long fatiguing marches and enables combat units to arrive fresh on the field of battle ready for extended cross-country maneuver; the importance of which in future warfare is now incalculable. Thus we find in modern warfare that the horse still is a dominating factor in strategic and cross country tactical maneuverability.

Today, Germany maintains seventeen regiments of horse cavalry, plus various other mounted combat units. Italy has twelve horse cavalry regiments. The Japanese, who have little natural aptitude for horsemanship, maintain twenty-five horse regiments. Russia has a total of approximately 140 regiments of horse cavalry.

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*Page 415, The CAVALRY JOURNAL, September-October, 1940.

The American cavalry, however, unlike the European cavalry, is heavily armed and trained to fight both mounted and dismounted. Until World War I European cavalry, failing to profit by our experience in the American Civil War, fought almost entirely with the lance and saber. Today it is armed chiefly with carbines and pistols.

By contrast, our horse cavalry is armed with machine guns, of several calibers; antiaircraft and antitank guns; numerous reconnaissance and fighting vehicles; mortars; pistols and the semiautomatic rifle—a fighting force that is unique in history. Our cavalry is the most adaptable of all arms where roads are few or poor, or quickly become poor in battle areas. It is *an all-purpose arm for ground reconnaissance and exploitation of success, or failure.*

Modern war has proved the essentiality of the war horse. The Press mediums of the country are beginning to realize this fact. The full-page articles which recently have appeared voluntarily throughout the United States refuting the layman's prejudiced opinion that the horse is obsolete are ***not an apology*** for horse cavalry, but a sincere effort to keep our public properly informed.

The United States has a greater potential horse-weapon than any other country in the world. We should take full advantage of this valuable asset.

There are 11,000,000 horses in the United States today, the majority of which could be used in war.

Our Horse Cavalry

Extract from comments by Lieutenant General John L. DeWitt on the Fourth Army Maneuvers held at Fort Lewis, Washington, in August, 1940:

"Horse cavalry gives the commander fire power of a type that is invaluable. Modern horse cavalry carries a tremendous punch if properly used in mass. So used it is a very valuable asset in the situations that occurred in this maneuver of a river crossing or the defense of a river line. The orthodox theory of using cavalry on the flanks and front is questionable now if motorized units can meet the requirements. The mass movement, the mass action and the mass fire of this mobile unit are what make this arm so effective. It is mobile fire power par excellence."

Our Remount Situation

EDITOR'S NOTE: *As a result of numerous recent queries relative to matters pertaining to our Remount Service, a letter was addressed to Colonel Edwin N. Hardy, Chief of the Remount Section, Quartermaster Corps, requesting information. His reply contains facts believed to be of general interest to our readers. The following excerpts are quoted:*

* * *

PRESENT LOCATION OF REMOUNT ESTABLISHMENTS

REMOUNT DEPOTS

Front Royal Quartermaster Depot (Remount), Front Royal, Va.

Reno Quartermaster Depot (Remount), Fort Reno, Okla.

Robinson Quartermaster Depot (Remount), Fort Robinson, Nebr.

REMOUNT AREAS

Eastern Remount Area, Hq. Front Royal, Va.
East Central Remount Area, Hq. Lexington, Ky.
North Central Remount Area, Hq. Kansas City, Mo.
South Central Remount Area, Hq. San Angelo, Tex.
Northwestern Remount Area, Hq. Fort Douglas, Utah.
Southwestern Remount Area, Hq. Colorado Springs, Colorado.
Western Remount Area, Hq. San Mateo, Calif.

ARMY HORSE BREEDING PLAN

The basis for the success of our Remount Mission is the successful operation of our Army Horse Breeding Plan. This provides for assigning stallions to approved agents throughout the United States who will provide them with proper care as to stabling facilities, feeding, grooming and exercise, and who will breed these stallions each year to a suitable number of mares of reasonable type for the production of riding horses. At the present time the Remount Service has 715 stallions available for stud duty as follows:

Thoroughbred	679
Arabian	18
Morgan	15
Saddlebred	3

This plan was inaugurated on July 1, 1920. By December 31, 1939, 258,960 mares had been bred to our Remount studs and have produced, as far as we can ascertain from reports, 155,370 foals, conservatively valued at $23,305,500. The annual foal crop from our Remount studs is now well in excess of 10,000 animals. While we are anxious to further increase the number and suitability of foals produced each year, the results of our breeding plan have been very satisfactory, as evidenced by the fact that the Army today is mounted on better horses than at any time in its history.

I have recently had an opportunity to inspect in our three Remount Depots approximately 4,000 animals which have been recently purchased. I judged the suitability of these animals to be as high as it has been in normal times. We are purchasing this year 27,360 animals, approximately 8,000 of which have already been purchased and of which latter number approximately 2,500 have already been processed through the depots and issued to troops. According to surveys from the field, we have a reasonable expectation of being able to supply the required number of animals without lowering our normal standards of suitability. It may, however, develop that it may be necessary to raise the age limit to include horses 10 years of age.

On my visit to the maneuvers in the Sabine area last spring, I had an opportunity to observe approximately 4,000 horses in the maneuver area under service conditions. The main purpose of my visit was to endeavor to ascertain the faults of the Remount Service in the procurement of horses from a field service point of view. As a result of my study of the situation I estimated that from 6 to 10 per cent of the horses in ranks were lacking in the necessary substance. There were a few in each organization which were too weedy, light-waisted, and spindle-legged. In talking over the suitability of the horses with various people from Generals down to including Stable Sergeants, I was interested to note that not one objection was made to any of the animals being too coarse. Naturally, I compared this reaction with the reaction we often get from the using agencies in normal times when there has been considerable criticism of common horses and a favoritism shown for the lighter and finer horses. In the present situation the Remount is guided by the conviction that if a horse has reasonable conformation, strong feet and legs, and moves well, he will prove to be a serviceable animal even though he might show considerable coarseness and some draft blood. In other words we are now, all of us, thinking only in terms of the "Marching Horse."

RECEIPT, CONDITIONING AND ISSUE OF ANIMALS

Our procurement program, of course, must be balanced against the capacities of our three depots and the demands of the using agencies as to what they require, when, and where. There are many other factors entering into the procurement of animals which must be balanced such as the availability of animals in various areas, the most logical depot to receive a shipment of animals, and the location of the units to which the animals will eventually be issued. We are executing our procurement program without the addition of any new depots. We are expanding our three present depots so that each of the two western depots can contain a maximum of 4,500 animals, and the Front Royal depot 3,500 animals. By December 20, 1940, our plans call for approximately 20,000 animals having been procured and in depots, with the exception of approximately 6,000 animals which by that time we expect to be through their processing in the depots and issued to troops.

Whenever we issue animals to a using agency, we request that the animals be *rated* by a suitable officer as to health, flesh and suitability for the purpose intended. There is noticed in this office a considerable variance as to the care various units exercise in accomplishing these ratings. The idea of asking for these ratings is to give those people who are to use the animals we procure an opportunity to remark on their suitability for the purpose intended and on the result of our processing in the depots with reference to their health and general condition at the time of issue, also gentleness to ride or drive. It is obvious that these ratings should be very carefully accomplished and it has been our experience that only qualified officers of long experience in the arm concerned should be assigned to this duty. We note with a great deal of satisfaction that in some regiments *the regimental commander himself always accomplishes the ratings for every shipment to his regiment.*

It may be of interest to know what we try to accomplish with newly purchased horses when they are received at our depots and before we issue them to troops. Within the first 3 or 4 days after animals are received at a depot, they go through a regular routine which involves branding with a Preston brand, worming, dipping, checking against the Horse Record Card, malleining, etc. Horses are arranged in groups so as to be able to provide the necessary segregation principally with reference to glanders until the 21-day period has been passed, when animals are again malleined. After this second malleining we do not attempt segregation unless there be some particular reason to indicate that it should be done. We are anxious that animals come down with their shipping sickness, strangles, distemper, etc., as soon after arrival on a depot as possible. Such animals will be ready to ship as soon as they are over their sickness, have attained a proper degree of training and are excellent as to flesh and general condition. In order to insure that units will not be bothered with animals that might get sick en route, or after being received by the troops, in normal times we have required that animals remain on a depot for at least 120 days; during the present emergency we are permitting depot commanders to issue animals to troops after 60 days on a depot, provided the animals at that time show no signs of sickness and have passed the training test and are in excellent state as to flesh and general condition. It has seemed advisable to do this in view of the increased rate of issue demanded by the services. I expect, however, that an appreciable number of these animals will get sick after being received by the troops; if it develops that too many of these 60-day animals come down with sickness after receipt by the troops, and if the receiving units request that they be maintained on depots longer, the Remount Service will adjust its operations so as to comply. It will mean, however, that there will be a slowing up in the rate of issue. I have long contended that the greatest development in Veterinary Service was a serum or vaccine, which would immunize horses from such diseases as distemper, strangles, etc. Think of how this would speed up getting newly purchased horses to troops. We are working on such a serum at our laboratory at Front Royal, Va.

On the whole, reports received on our shipments have been very favorable indeed. The rating sheets above referred to, rate each individual animal, and are sent to my office, we then add any comments we think advisable, and a copy of the rating sheet is sent to each depot and Remount Area concerned in the procurement and processing of the animals in question. In other words, you can see that our system provides for this office getting a report on every animal issued by the Remount Service. It further provides for every depot issuing an animal getting a report as to what the receiving agency thinks of the animal as regards the manner in which the depot commander has put him into good health, flesh and general condition and training. It also provides for the officer who bought the animal knowing what the receiving unit thinks of the animal as to his suitability for the purpose for which he was purchased. I am stressing all of this because it provides for coöperation between the Remount and the using agencies, which is important. We do not try to "whitewash" criticism. If we make a mistake, we try to use it as a means to avoid making the same mistake again.

I am inclosing herewith a mimeograph giving a general outline of the *Army Horse Breeding Plan,* a list of the *Distribution of Remount Stallions by States for the 1940 Breeding Season,* and a copy of *"Notes on Horse Breeding."**

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*Those interested can obtain these pamphlets by writing direct to the American Remount Association, Otis Building, 810 18th Street, N.W., Washington, D. C.

Mules

The approximate number of mules in the United States as of January 1, 1940, is 4,321,000. It is estimated that not less than 10 per cent are suitable for military service under present specifications, and that about 30 per cent would be suitable for some form of military service in case of emergency.

CARDED

New Ordnance With the Cavalry Division

By Lieutenant Colonel Robert W. Daniels, Ordnance Department[★]

WHEREAS it would seem that in the past the cavalry division's mobility probably outclassed considerably its fire power, it is gratifying to note that with the new weapons now being furnished, the fire power and in fact the whole sustaining power of the division, are being well brought up to par with the mobility. And this is not being done at any sacrifice of the mobility; for this important characteristic is also being augmented. This augmentation of mobility is being partly accomplished by addition of regimental vehicles, but it is also greatly aided by the strengthening of the reconnaissance squadron, incorporating the assignment of motorcycles, combat cars and more scout cars; and by the introduction into brigade and division headquarters of additional rapid-moving units, the antitank troop and the brigade special weapons troops.

CAPABILITIES AND ASSIGNMENTS OF NEW WEAPONS

This author proposes specifically to discuss primarily the ordnance now involved, we, therefore, will turn to the weapons.

RIFLE TROOPS

The semiautomatic rifle is scarcely thought of now as a new weapon, and yet it is of course quite new, and very much in the picture of new weapons. There has been some feeling in some quarters that this rifle is unnecessarily complicated and requires undue care. But it is believed the tendency toward some degree of complexity is a necessary concomitant to modern ordnance. Even the muzzle loader shows this in comparison with its forerunners, the bow and the cross-bow. In spite of all efforts on the part of designers to make their matériel simple and foolproof in its operation, nevertheless in order to achieve desired results and to take advantage of the latest steps in scientific achievement, ordnance cannot help being complicated in its structure and design, and its operation can only be successfully managed if personnel in whose hands it is placed show a degree of judgment and mechanical alertness that did not exist 40 years ago among the average soldiery. We all must know our weapons, with a full knowledge of their possibilities and alertness as to their short comings. The M-1 rifle in the hands of soldiers who appreciate that it is not merely a firearm, but a machine as well, have a tremendous advantage over men armed with an old-fashioned weapon. On the other hand an ignorant individual with this rifle would probably be worse off than if he had an old muzzle loader of 19th century vintage. At any rate recent combat practices with the M-1 rifle held at Fort Bliss under unfavorable conditions show a sum total of target hits around 50% greater than are usually found in similar practice with the 1903 rifle.

Every trooper is armed with the caliber .45 pistol.

The six rifle troops still contain six light machine gun squads. This weapon has of late been proved to be a remarkably accurate and serviceable machine gun in extensive firing. In recent qualification courses fired by one regiment, over 92% of the entire personnel, enthused and ably instructed, qualified as marksman or better. There is a lighter and better weapon under study, but in the meantime the present light machine gun is an arm not to be discounted; and its advantages against moving or fleeting targets, against which we must be more and more on the alert, are only too obvious.

MACHINE GUN AND SPECIAL WEAPONS TROOPS

In addition to the power which the semiautomatic and the light machine gun distribute throughout the rifle troops, each regimental commander of cavalry has under his control an augmented machine gun troop, and a special weapons troop. The machine gun troop is equipped with the latest improved water-cooled gun, caliber .30 only; twelve guns per troop. Function of the troop thus is antipersonnel, with pack horse mobility. It can travel anywhere the rest of the regiment can go. The special weapons troop has a complement of 8 caliber .50 guns and 4 81-mm. mortars. With the striking power of these two troops the regimental commander is well equipped to bring fire with a minimum of delay in concentrated form upon enemy personnel, upon fast moving lightly armored targets, and upon positions of organized defense. The mortars should be particularly effective in broken and hilly country where indirect fire is essential and plunging trajectories are required. They will also perform good service in laying down smoke screens at a distance. The mortar is a simple weapon, the barrel being a tube of steel with firing pin at the breech end in constant readiness. The bore is smooth and the projectiles are equipped with fine assemblies for air stabilization. This method of stabiliza-

81-mm. Mortar Emplaced. Piece has been laid and projectile about to be loaded

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[★] Ordnance officer, 1st Cavalry Division, Fort Bliss, Texas.

37-mm. Antitank Gun. Presents a low silhouette

tion as a rule is to be preferred over the use of rifling and consequent gyroscopic stabilization when the trajectories are high; or in particular when the angles of elevation are appreciably above forty-five degrees. Increments of powder charge are contained in small capsules which can readily be discarded in order to provide lesser charges for the shorter zones. A range of nearly two miles is obtainable with this weapon when the small type of projectile is used. The base plate and bipod mount with sighting equipment complete the unit. The three parts of the unit weigh about forty-five pounds each, and are therefore quite maneuverable by hand short distances. The sight is a simple collimating device of rugged construction. Indirect fire is the rule. A distant sighting point may be used provided firing data is accurate. With estimated data only, a trial round may be fired, an aiming stake set up in front of the weapon and from this proper deflections taken. Operation is simple, the projectile merely being dropped down the muzzle of the piece after it is laid. The shotgun cartridge inside the fin assembly strikes the fixed firing pin at the end of its fall, and thus the round is fired. The accuracy is high and the explosive force of the shell compares favorably, in fact exceeds, the effectiveness of the 75-mm. gun.

Besides being furnished to regimental weapons troops, the mortar is part of the brigade special weapons troops.

ANTITANK GUNS

The antitank gun has been reserved for direct control of brigade and division commanders. These guns have been grouped into special weapons troops, one per each headquarters, where they can be readily available for fast transport to any point.

The addition of this 37-mm. gun to the cavalry division is no doubt one of the most effective single steps ever accomplished. It weighs, complete with carriage, 912 pounds; fires about 25 shots a minute and is ideal against fast-moving targets. It is well balanced on its pintle and has an angle of traverse of 60°, pointing with very little effort. In operating this piece one man, the gunner, does the sighting and handles both the elevating hand wheel and the traversing hand wheel. Unlike the heavier cannon which may require two men for laying, this method places complete control over pointing the gun in the hands of one man. It is comparable to the sighting of a rifle with obvious advantages in firing at moving targets. The wide traverse of the piece can be taken advantage of immediately through the agency of a release mechanism which the gunner also can operate, making it a completely free gun insofar as traverse is concerned. So it is possible for the gunner to shift from one extreme limit of traverse to the other in a fraction of a second.

The gun is equipped with a protective shield, the top or main part of which traverses with the gun itself. In this way the shield is never an obstacle to either the sighting or laying. The bottom part of the shield, or apron locks into a raised position for traveling and drops down nearly to the ground when the gun is in firing position.

The firing mechanism is also under continuous control of the gunner and placed immediately above and concentric with the elevating hand wheel. This enables the gunner to press the firing plunger with the thumb of his right hand the instant his gun is properly sighted. Training in "leads" and in estimating ranges is of course paramount.

Operating the breech block and serving ammunition are the only other functions to be performed when the piece is in action. These should be as continuous as necessary.

The dual trails give ample stability throughout the 60° angle of traverse. They should be locked in position to give necessary rigidity to the carriage. When the ground upon which the piece is emplaced is irregular, a compensating device allows the carriage to adjust so that all four points of support are in proper contact with the ground and assuming their proportionate share of the stresses.

Since this weapon is designed for customary use at short ranges, no correction for cant of the piece is incorporated. Consequently for accuracy at long ranges it is advisable to see that the emplacement is made on reasonably level ground; or as an alternative a slight amount of digging in may be done in order to bring the carriage approximately to the level.

Time of going into action is short. Between the dropping of the lunette from the prime mover and firing the first aimed shot there should not elapse more than 20 seconds.

The one-power telescopic sight provides an aiming reticle in a collimator. In this way it gives a wide field so that the target can be kept in view. The armor piercing projectile has a velocity of 1,276 feet per second and will penetrate armor up to 2″ in thickness. While the maximum range of this weapon is about 7,000 yards, its most effective use against moving targets will be confined to under 1,200 yards. The most essential training with this weapon involves its use against moving targets. We are fortunate to have at Fort Bliss two admirable courses upon which targets run between 30 and 40 miles per hour, offering ranges between 300 and 1,500 yards. The targets are readily presentable in groups, thus simulating closely the advance of hostile mechanization.

Each of these 37-mm. guns is towed by a scout car which is in itself a well armored vehicle so that these weapons troops represent very highly concentrated units of power and mobility.

Scout Cars

The scout cars of the latest type constitute a well armed and armored unit, with two-way radio equipment, mounted on a four wheel drive chassis. They can if necessary make a velocity of 50 miles per hour on smooth going. Their cross-country ability is good and with puncture sealing tires they present a target which is difficult to stop. Although their primary purpose concerns itself with the service of information, nevertheless they can if necessary put up a stout fight. The radio equipment, coupled with their own traveling ability, makes these vehicles invaluable in getting information back to the various headquarters and in a space of time which is only a fraction of what was required a few years ago. The machine guns which constitute the armament can be swung around a firing rail encircling the scout car body, so that firing may be effected in any direction almost instantly. It is worth noting that although while the caliber .50 guns are firing there is some noticeable pulsating, because of the tremendous horse power of the weapon, nevertheless the period of these pulsations is such as apparently not to destroy the aim of the personnel or the impact of its bullets to any noticeable degree.

Artillery

Not the least of the additions in armament for the cavalry are those which have been made in the supporting artillery. This correction has been very wise. In the same way that regimental and brigade commanders have been allotted a large addition in the ordnance for their immediate control, so now to an even greater extent the division commander is aided greatly by the addition to his artillery. The 75-mm. field howitzer matériel has been raised to two full battalions of three batteries each, in place of the reduced battalions of only two batteries each; and in addition a third battalion of 105-mm. howitzers has been included.

Thus the modern plan of attachment of artillery to brigades is now practically automatic, one battalion of 75 howitzers per brigade; at the same time the battalion of howitzers firing about a 40 pound projectile will most naturally remain where it should, under direct control of the division commander. All of these guns are capable of rapid transport. The 75's are horse drawn but they are light and maneuverable and can traverse almost any terrain that the cavalry can negotiate. With their split trail, they are capable of quick transport of fire, are very good tactical weapons and use can be made of them as very satisfactory anti-tank weapons when necessary. The 105-mm. howitzers are drawn by truck, being handled at least 25 miles per hour over fair roads and with the standard 4 x 4 truck as prime mover should be capable of negotiating any reasonable terrain. It must be remembered however that the maneuvering of the piece is made much less necessary by the fact of its very considerable range. As a consequence of this they can assure fire concentration in many different spots without moving themselves an inch. Their higher trajectory and heavy shell should make them of valuable assistance in reducing targets such as might be taken under fire by the cavalry's mortars in cases where reduction by the cavalry is presenting difficulties.

Antitank guns in tow

There has also been added to the artillery three units of 37-mm. anti-tank guns, on the basis of six guns per unit, one unit per battalion. This departure from standard artillery weapons is noteworthy and indicates still further the emphasis which has been laid on defense (or offense) against mechanized bodies.

Reconnaissance Squadron

The enlargement of the reconnaissance squadron to its proper size of four troops is under way; two of these troops are equipped with 20 scout cars each, one troop is a combat troop having 13 combat cars, and one troop is a motorcycle troop. A Thompson submachine gun is furnished for each motorcycle. The scout cars have the usual armament of one caliber .50 machine gun and two caliber .30 water-cooled guns. The combat car troop will have its vehicles armed with usual combat car equipment, in-

A Combat Car

Samples of Ordnance with which the Division is armed

cluding 37-mm. tank guns. Thus the squadron may be said to have one troop for light reconnaissance, two troops for medium reconnaissance and a troop for combat reconnaissance. This furnishes the division commander with a powerful unit, ably equipped for extensive reconnaissance operations, and at the same time capable of keeping him continuously informed as to its whereabouts and the results of its operations.

WEAPONS ASSIGNMENT

Further changes for the future are already indicated, depending upon a theatre of operations and type of warfare involved. The most radical of these improvements in my opinion would be to assign about two 75-mm. field howitzers to each regimental special weapons troop. These guns should probably be horse-drawn. They would virtually be accompanying guns and would give the regimental commander a completeness in solving his tactical problems which he has never had before. The horse method of transport for these guns appears preferable to motors because it assures the same velocity of movement and continuous availability of these guns with the rest of the troops. The chances of being lost or out of hand would be minimized. They would also be less readily distinguishable by enemy observers from other horse troops with which they would be operating, and in case of disablement of horses in the teams emergency replacements should be simple. Cannoneers would be mounted preferably on horses schooled in light draft. The supply of ammunition should not present any insurmountable difficulties since the expenditure would as a rule not be heavy over extended periods of time. Personnel handling these weapons should be particularly trained in firing at moving targets and preferably cavalry officers assigned to this type of duty receive thorough training in the technique of gunnery from the commander of the division of artillery; by some such means as this we will insure that these guns will be able to make effective use of their range and power against mechanized targets and to perform this duty they will have to be placed with the advanced elements. The easily concealed silhouette of the gun suits it well for this use.

With regard to the assigning of 37-mm. anti-tank guns to brigade and division headquarters command, it is believed in the case of these weapons better results would be obtained if they (and more of them) were assigned to regimental command, in the interest of being brought into play more quickly. Recent experiences in maneuvers tend to confirm this belief.

CARDED

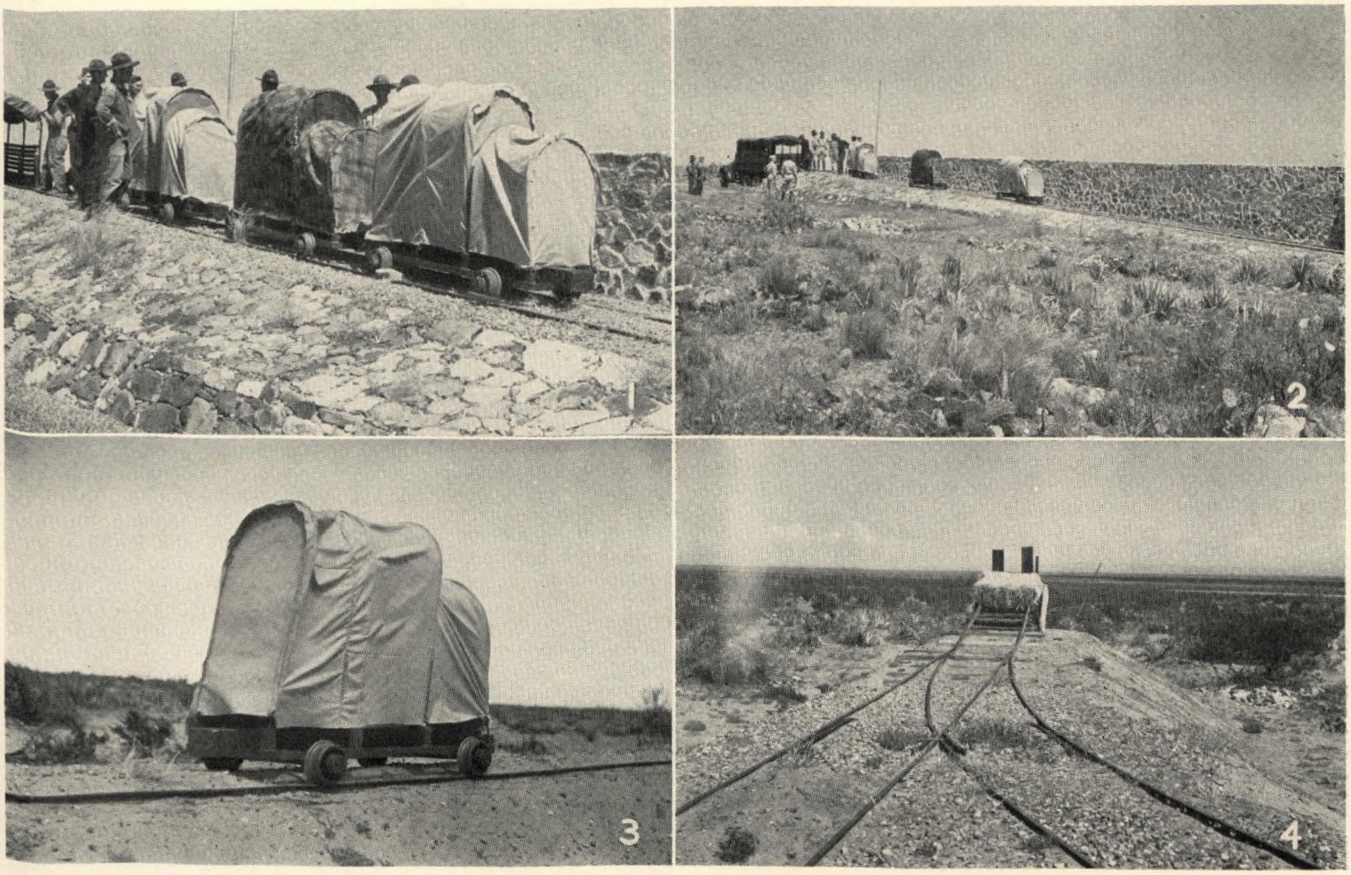
MOVING TARGET RANGE

AN interesting and unique moving target range has been installed at Fort Bliss, Texas, by Ordnance and Engineer officers of the First Cavalry Division, under command of Major General Robert C. Richardson, Jr. It operates by gravity and a speed of more than 30 miles an hour can be developed. The sloping land east of the Franklin Mountains in the vicinity of Fort Bliss offered an ideal location for the experiment which has become a fixed feature for range practice. Tanks and scout cars are simulated by the targets which move over narrow-gauge railways about a mile and a half long. Curves, straightaways, and defiladed sections are provided, and the speeding cars look and act very much like motorized war-machines. Group movements are customary to more accurately picture the approach of a wave of attacking vehicles.

The target cars are covered with canvas or cloth stretched over a frame, and measure about 8 feet long and 4 feet high from the wheels. When they have reached the lower end of their courses the hits are counted and pasted. The cars are then easily loaded on trucks and returned to the starting point. A short switch-back at the terminal permits each successive target to be quickly shifted by two men away from the natural place of collision. Some 50 feet before the terminal is reached, the tracks run up-grade to slow the progress of the approaching target cars and check their contact with a bumper, faced by a bale of straw.

Intervals between cars moving along the courses are about 300 yards. With the exception of occasional defiladed stretches of trackage, the targets can be seen at all times.

Its purpose is to give all possible types and calibers of weapons practice-firing on these novel ranges, which avoid the need of towing by cables.



(1) The target cars are unloaded from a truck and placed on the narrow-gauge tracks, ready for release over the course. (2) One by one, the cars are started along the slight down-grade that provides gravity and a speed of more than 30 miles an hour. Distance between them is about 300 yards. (3) A close-up view of a moving-target. (4) The end of the course. Note the up-grade trend and the short switch-line onto which the successive target-cars are pushed by hand.

The Chief of Cavalry
Extends to all Cavalrymen
And Their Families
The Season's Greetings
And Best Wishes
For a Happy New Year

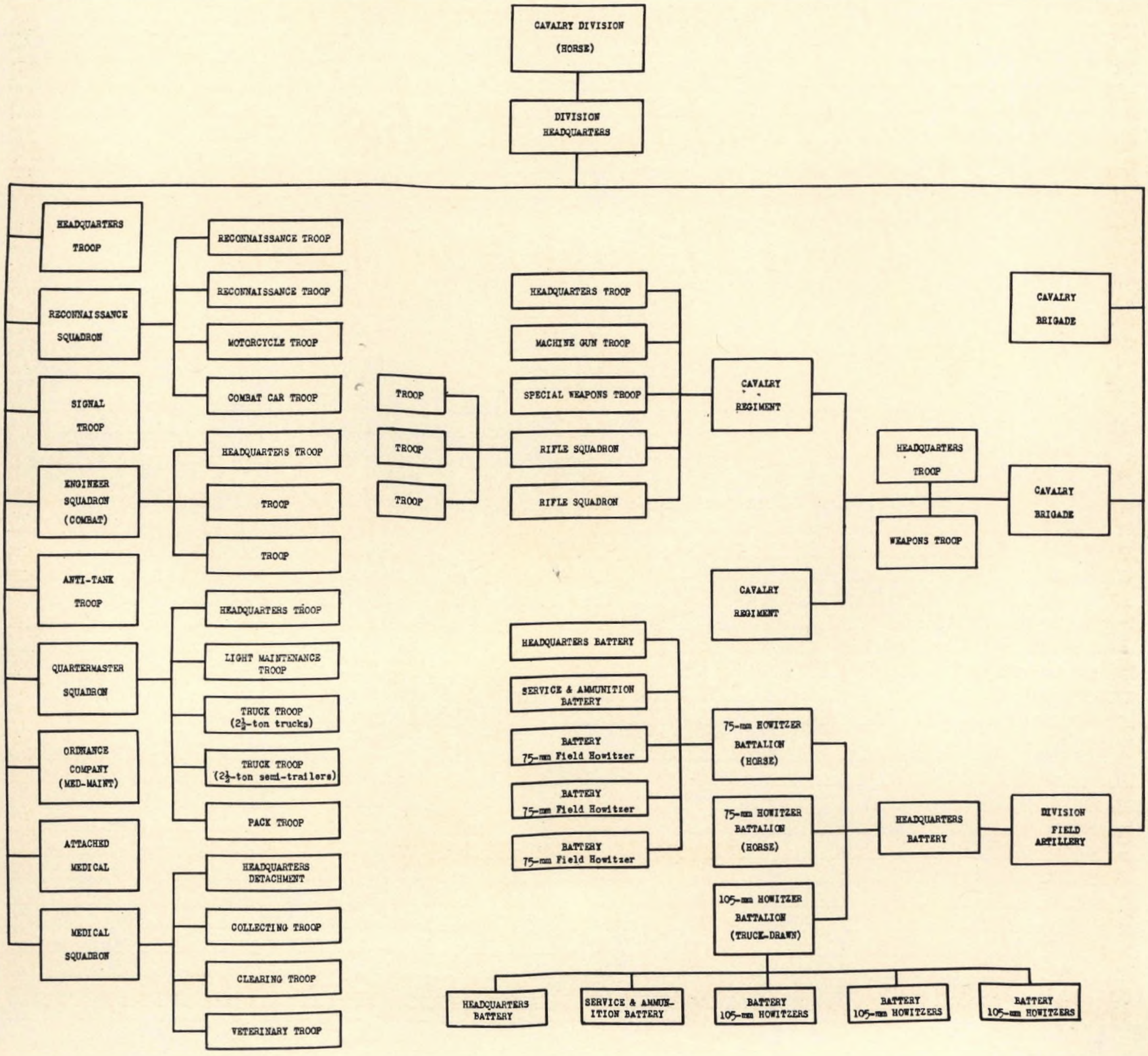
Notes From the Chief of Cavalry

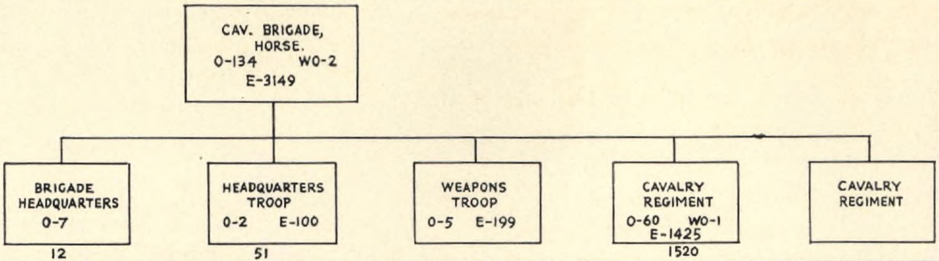
REPLACEMENT CENTER

When the Cavalry Replacement Center opens next spring for operation, there will come into being an activity of considerable magnitude within the arm. The peak load which this Replacement Center will carry amounts to 7,000 which includes also the overhead training personnel required. Actually, there will be 6,085 trainees to go through the intensive training envisaged for this period of their year's duty with the Army.

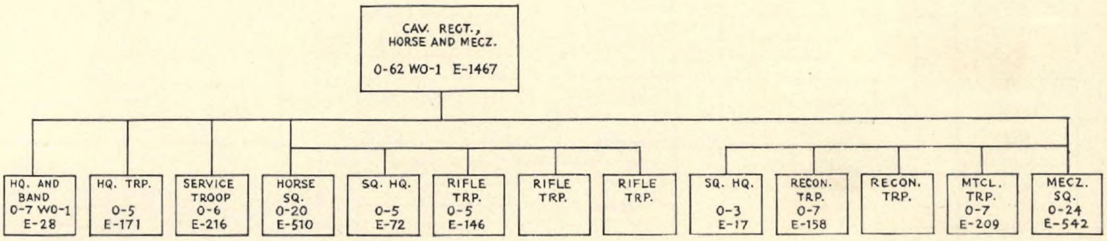
Complete detailed preparations will have been completed prior to receipt of trainees. Advance training will be given to the overhead cadres which in turn will be taken in proportionate numbers from all regular units. The bulk of administrative and training duties will fall upon the shoulders of Reserve Officers who will be especially selected for this duty. From tentative figures, it appears that approximately 158 Reserve Officers will eventually be involved in this work.

The Chief of Cavalry considers the organization and operation of the Cavalry Replacement Center as one of the most important duties which will befall the Cavalry under the current War Department program. No item, however small, will be overlooked in assuring the successful operation of this activity. Upon the successful manner in which trainees are equipped for subsequent duties will depend in a large measure on the high standard of tactical


CAVALRY DIVISION (HORSE)
DIVISION HEADQUARTERS
HEADQUARTERS TROOP
RECONNAISSANCE SQUADRON
RECONNAISSANCE TROOP
RECONNAISSANCE TROOP
MOTORCYCLE TROOP
COMBAT CAR TROOP
SIGNAL TROOP
ENGINEER SQUADRON (COMBAT)
HEADQUARTERS TROOP
TROOP
TROOP
ANTI-TANK TROOP
QUARTERMASTER SQUADRON
HEADQUARTERS TROOP
LIGHT MAINTENANCE TROOP
TRUCK TROOP (2½-ton trucks)
TRUCK TROOP (2½-ton semi-trailers)
PACK TROOP
ORDNANCE COMPANY (MED-MAINT)
ATTACHED MEDICAL
MEDICAL SQUADRON
HEADQUARTERS DETACHMENT
COLLECTING TROOP
CLEARING TROOP
VETERINARY TROOP
TROOP
TROOP
TROOP
HEADQUARTERS TROOP
MACHINE GUN TROOP
SPECIAL WEAPONS TROOP
RIFLE SQUADRON
RIFLE SQUADRON
CAVALRY REGIMENT
CAVALRY REGIMENT
HEADQUARTERS TROOP
WEAPONS TROOP
CAVALRY BRIGADE
CAVALRY BRIGADE
HEADQUARTERS BATTERY
SERVICE & AMMUNITION BATTERY
BATTERY 75-mm Field Howitzer
BATTERY 75-mm Field Howitzer
BATTERY 75-mm Field Howitzer
75-mm HOWITZER BATTALION (HORSE)
75-mm HOWITZER BATTALION (HORSE)
105-mm HOWITZER BATTALION (TRUCK-DRAWN)
HEADQUARTERS BATTERY
DIVISION FIELD ARTILLERY
HEADQUARTERS BATTERY
SERVICE & AMMUNITION BATTERY
BATTERY 105-mm HOWITZERS
BATTERY 105-mm HOWITZERS
BATTERY 105-mm HOWITZERS



TOTAL IN BRIGADE		BRIGADE HEADQUARTERS 0-7	HEADQUARTERS TROOP 0-2 E-100	WEAPONS TROOP 0-5 E-199	CAVALRY REGIMENT 0-60 WO-1 E-1425	CAVALRY REGIMENT
3103	HORSES, INCLUDING	12	51		1520	
(382)	(PACK)		(4)		(189)	
1	CAR, LIGHT, 5-PASS. SEDAN		1			
38	CAR, SCOUT		6	18	7	
6	CARRIAGE, MORTAR			6		
41	MOTORCYCLE, SOLO		5	14	11	
41	TRICYCLE, MOTOR		2	3	18	
7	TRUCK, COM-RECON.		1	2	2	
3	TRUCK, PICKUP			1	1	
55	TRUCK, CARGO		3	4	24	
113	MG (LT.), .30		2	3	54	
106	MG (H), .30		12	42	26	
74	MG (HB), .50		7	25	21	
126	MG (SUB), .45		13	41	36	
12	37-mm, AT			12		
14	MORTAR, 81-mm			6	4	
3285	PISTOL	7	102	204	1486	
1974	RIFLE		21	33	960	
36	SET, RADIO, INCLUDING		8	6	11	
(8)	(SCR-203, PACK)		(2)		(3)	
(28)	(SCR-245)		(6)	(6)	(8)	



TOTAL IN REGT.		HQ. AND BAND 0-7 WO-1 E-28	HQ. TRP. 0-5 E-171	SERVICE TROOP 0-6 E-216	HORSE SQ. 0-20 E-510	SQ. HQ. 0-5 E-72	RIFLE TRP. 0-5 E-146	RIFLE TRP.	RIFLE TRP.	SQ. HQ. 0-3 E-17	RECON. TRP. 0-7 E-158	RECON. TRP.	MTCL. TRP. 0-7 E-209	MECZ. SQ. 0-24 E-542
1	COMPRESSOR, AIR		1											
555	HORSES, INCLUDING				555	93	154							
(61)	(PACK)				(61)	(16)	(15)							
68	CAR, SCOUT		17	3						2	20		6	48
114	MOTORCYCLE, SOLO		16	14						2	22		38	84
61	TRICYCLE, MOTOR		5	17						1	1		36	39
15	TRUCK, COMMAND-RECON.		3	9							1		1	3
11	TRUCK, PICKUP		5	2						1	1		1	4
45	TRUCK, CARGO		6	27							4		4	12
74	TRUCK-TRACTOR, W/SEMI TRAILER			74										
1	TRUCK, WRECKER			1										
110	(MG) (LT), .30		5	78	18		6				3		3	9
136	(MG) (H), .30		34	6						4	40		12	96
99	(MG) (HB), .50		18	26	4	4				2	21		7	51
243	(MG) (SUB), .45		38	34						5	43		80	171
6	37-mm, AT		6											
1530	PISTOL	36	176	222	530	77	151			20	165		216	566
732	RIFLE		10		386	17	123				31		74	136
76	SEt, RADIO, INCLUDING		13	11	4	4				2	20		6	48
(5)	SCR-193		(3)	(2)										
(4)	SCR-203				(4)	(4)								
(67)	SCR-245		(10)	(9)						(2)	(20)		(6)	(48)

efficiency which is expected every Cavalry unit will exemplify in the days ahead.

New Cavalry Detachments

Under present plans, the 10th Cavalry now on duty at West Point, Fort Myer, Virginia and Fort Leavenworth, will be assembled as a tactical unit at Fort Riley by next January. Likewise, the 9th Cavalry will be relieved of school duties in connection with the Cavalry School and assembled as a tactical unit at Fort Riley.

When the 10th Cavalry is relieved at West Point and Fort Myer, it will turn over its present duties to two new Cavalry detachments. At West Point there will come into existence the United States Military Academy detachment; at Fort Myer, there will be created the Cavalry detachment, Fort Myer, Virginia. At Fort Riley, the important duties now rendered by the 9th Cavalry will be assumed by a Cavalry School detachment (colored). The functions rendered by the foregoing detachments are important to many phases of the Army. It is significant that these duties will continue to be performed under responsibility of the Cavalry.

First Squadron, 14th Cavalry and Band Transferred to Fort Riley

As a preliminary step to the eventual organization of the 2nd Cavalry Division, the 1st Squadron, 14th Cavalry, will be moved shortly from Sheridan, Illinois to Fort Riley. With the arrival of the band of this regiment at the Cavalry School, the garrison at Fort Riley will have the benefit of two bands as the 9th Cavalry band is already available.

Tables of Organization

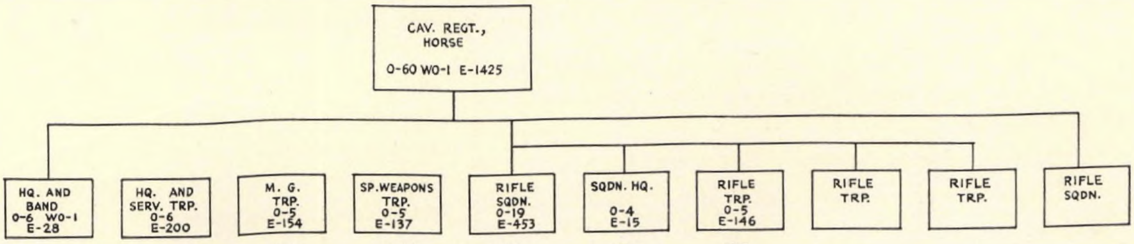
There appear herewith Tables of Organization prepared by the Chief of Cavalry showing useful information on the organization of the Cavalry Division, Cavalry Brigade, the Cavalry Regiment, horse, and the Cavalry Regiment, horse and mechanized. These Tables are useful in showing at a glance the personnel strength of each unit, and its allotted equipment including horses. Not only are total numbers of each item shown for the particular unit, but its distribution through the unit can readily be seen.

Equipment

In the month of October the Tables of Basic Allowances for Cavalry were completely revised, in conjunction with new Tables of Organization. These tables are now being processed by the various services. Recommendations of the 1st Cavalry Division, The Cavalry Board, and the two horse and mechanized regiments were considered in making up the new tables. Among the recommended changes are:

> Basis of issue of .30 caliber ammunition to 20% tracer and 80% armor piercing.
>
> Additional equipment for pioneer and demolition platoons for H & M Regiments.
>
> A standard 15 jewel wrist watch instead of the 7 jewel wrist and 15 jewel pocket watches.
>
> Substitution of a better compass.

The Quartermaster General will purchase a large number of ¼ ton, 4 x 4 command reconnaissance cars. The Cavalry will receive several hundred of these for an extensive service test. The employment of this "baby car" will probably be similar to that contemplated for the motor tricycle.



TOTAL IN REGT.		HQ. AND BAND 0-6 WO-1 E-28	HQ. AND SERV. TRP. 0-6 E-200	M. G. TRP. 0-5 E-154	SP.WEAPONS TRP. 0-5 E-137	RIFLE SQDN. 0-19 E-453	SQDN. HQ. 0-4 E-15	RIFLE TRP. 0-5 E-146	RIFLE TRP.	RIFLE TRP.	RIFLE SQDN.
1520	HORSES, INCLUDING	8	71	212	183	523	22	167			
(189)	(PACK)		(7)	(52)	(40)	(45)		(15)			
7	CAR, SCOUT		7								
11	MOTORCYCLE, SOLO		11								
18	TRICYCLE, MOTOR		18								
2	TRUCK, COMMAND-RECON		2								
1	TRUCK, PICKUP		1								
24	TRUCK, CARGO		24								
54	(MG) (LT), .30		18			18			6		
26	(MG) (H), .30		14	12							
21	(MG) (HB). .50		13		8						
36	(MG) (SUB), .45		36								
4	MORTAR, 81-mm				4						
1486	PISTOL	35	206	159	142	472	19	151			
960	RIFLE		65	78	61	378	9	123			
11	SET, RADIO, INCLUDING		11								
(3)	SCR-203, PACK		(3)								
(8)	SCR-245		(8)								

General Hawkins' Notes

Training and Leadership

NOW that the army is being enlarged to an almost unprecedented extent, it is time for officers to think upon methods of training and to profit by our former experiences. It is necessary not only to train the new men but to train them quickly. In the first place, the emergency demands it; in the second place, most of the new recruits are in for only one year, and it is desirable to train them individually so quickly that units of all sizes may have tactical or collective training as well as individual training. It becomes necessary, therefore, to train the new men in the *great essentials* only, and to let them learn the things of lesser importance at odd and unscheduled hours and by the effects of time and experience.

For example, we do not need to require the recruit to learn the nomenclature of all the parts of all the weapons he may be learning to use. To do so is to waste time and overburden the recruit's mind. We do not need to waste time in teaching him to salute. He learns that by the example and occasional remarks of the noncommissioned officers and older men. We do not need to waste time on the drill fields in teaching a unit to pitch tents or to make a shelter tent camp. The recruit can learn that the first time he goes on a practice march and remains out over night. The recruits learn such things by doing them when they become necessary to do. The same thing may be said of personal hygiene and the care of themselves in the field.

How different is battle and all things that it requires! The recruit must learn battle essentials, prior to doing them in battle.

These are the *great essentials* in training.

Let every officer, in charge of training, make a list of the great essentials so that nothing will be forgotten and resolve to spend all available hours in teaching those essentials and nothing else until they are well learned.

The great essentials differ somewhat in different branches of the service, though some of them are common to all. This article will deal only with those essentials that pertain to the cavalry recruit and the squad and platoon.

When recruits come, they must be formed into squads and platoons immediately. Much of the individual training is necessarily mingled with or concurrent with the training of the squad and the platoon.

The relative position that the men take with regard to others and the coöperation between men is a part of the individual instruction as much as it is of the squad and platoon instruction. As soon as the men have been processed, have received their innoculations and drawn their clothing and equipment, the training begins.

The men should always be turned out in their squads with an appointed squad leader, for training or any other collective work. They should be given just enough squad *close order* drill to enable them to march or proceed to the places designated for training in an orderly manner. Incidentally, this marching to and from training areas is sufficient to teach them to march in step and in column or in line in a military manner. Thus, close order drill is taught while going to and from their work and no time is wasted on the training schedule for purposes of close order drill.

TRAINING SCHEDULES

Speaking of training schedules, a few remarks are pertinent. Training schedules should be very simple affairs. The form of the schedule is of no importance provided it is clear. There was a time when the form of the schedule was given more importance than its contents, by some persons. They seemed to try to "knock the eyes out" of the higher commander. But there is no room now for such nonsense. The schedule should be an informal list of subjects to be taught during the day. The subjects are arranged in the order thought desirable and a certain amount of time is allowed to each subject; but this time allowance is only tentative. It is merely a guess, and no one should expect it to be adhered to rigidly. The old idea, that the schedule submitted by a unit commander to his commanding officer should enable the latter to go out on the field at any hour or minute and find the unit doing exactly to the minute what the schedule prescribes, is preposterous.

The order in which the great essentials are taught is not of great importance, but I always liked to show a squad of recruits at the very outset the battle formations, offensive and defensive, so as to interest them in what all the other training leads up to. The men are taught how to deploy and how to advance while taking advantage of cover. Over very short distances, at first, the men are shown how to advance from cover to cover by short dashes of not more than five seconds duration, and at the same time keeping their intervals between each other. Defensively, the men are shown how to post themselves and how to dig in if necessary to make suitable rifle pits. While certain squads are doing those things others are instructed in the use of arms. Instruction in horsemanship is begun also as early as possible.

Thus, with short periods assigned to each subject, the instruction is varied during each day without tiring the recruit by too long periods at any one thing.

The whole day's work should not be more than six hours at first, and shoud be increased only gradually.

What are the great essentials thus to be taught?

1. *Battle Formations,* first dismounted and then mounted; for small units, squads and platoons, offensive and defensive.

2. *Use of Cover,* dismounted.

3. *Use of Arms.* At first, only those *arms* that are used by that part of the organization to which the recruit is to be assigned. Riflemen are instructed in the use of the rifle, pistol and grenades; machine gunners in the use of machine guns and pistols. Men assigned to antitank units commence their instruction with antitank weapons and pistols; and so on.

4. *Horsemanship,* including equitation and care of horses. Pure equitation is taught in very short periods and should be very simple. Most of the actual practice in equitation across country is had in the actual practice in the mounted tactical exercises, marching and patrolling.

5. *Drills.* Short, simple drill in forming column and line; close order and extended order; dismounting to fight on foot; conduct of led horses.

6. *Tactical Exercises.* These consist, for rifle platoons, in attacks mounted and dismounted; quickly assumed defensive positions; withdrawing from action; patrolling, taught in two phases—the drill of the patrol and using the drill of the patrol to meet various concrete situations; combat patrolling taught specially to noncommissioned officers; liaison patrols, another form of patrols taught specially to noncommissioned officers for the purpose of keeping connection between units laterally and in depth; the platoon as a covering force; hasty dispersion to avoid effects of air attack, and marching across country in such dispersion. Machine gun and antitank platoons use such of these exercises as apply specifically to them, particularly the quick deployments into action, dispersions, withdrawals from action, and liaison patrolling.

7. *First Aid.*

* * *

These things listed above are the *Great Essentials.* Nothing else should be scheduled for the first six or eight weeks. It will be noticed that individual training is more or less inseparable from collective training up to units as large as the platoon. Although training can be strictly individual and separate in such subjects as the use of firearms, equitation, first aid, and the use of cover, the men are taught even these things in groups and must learn individually to play their parts in the movements and actions of the squads and platoons.

There are many more tactical exercises for larger units, but these do not require any more of the individual instruction than those listed for the squad and platoon.

THE LESSER ESSENTIALS

Things of less importance, or what might be called the *lesser essentials,* such as camping, camouflage, saluting, grooming, saddling and packing, customs of the service, and even discipline itself, are acquired with time and experience. They are taught, as before said, by actually doing them and do not need to be put into training schedules.

Practice marching, so necessary to condition the infantry recruit, is not so necessary in the cavalry until a later date because the men get so much exercise and hard work in riding and caring for horses and horse equipment. There is much about marching, however, that has to be learned, and it should commence sometime after the sixth week. It is the *conduct* of marching by the officers and noncommissioned officers that needs the most careful attention and practice.

The crews of regimental scout cars and the men assigned to signal and radio detachments should have this individual training, particularly the use of arms, equitation, and first aid, in addition to their special duties, or before taking up their special duties.

LEADERSHIP

When the recruit comes into the army he comes into a different world about which he knows nothing. Everything is new to him. He has hundreds of things to learn. The instructor should not crowd his mind with too much at once, or the recruit will become dazed. The instructor will have to explain the important things many times. He cannot expect the recruit to remember everything he has been told only once or twice. Repetition, constant repetition, is a large part of the art of instruction.

The atmosphere around a group of recruits under instruction should be a cheerful one. Even gaiety should be permitted at times and actually fostered. Gravity should be preserved during much of the instruction, but a smile or laugh should not be checked except when on parade or where the men have been called to attention for proper purposes for short periods of time. If something funny happens, as it does especially in mounted drill or exercise, the men should not be scolded for laughing. There are times in field service when an officer would give very much to see a single smile. Cheerful attention to duty and cheerfulness in hardship and in times of danger should be cultivated and expected. This cannot be attained if the officer or noncommissioned officer is scowling and rough and sarcastic and disagreeable to the men individually or collectively. Impatience and insulting remarks should never be permitted. The instructor or leader should give an example of constant cheerfulness and interest in his work. It is only the martinet who attempts to conceal his own ignorance and lack of real leadership by pompous arrogance and insistence on rigidity and stiffness in the performance of the most unimportant little things. The more an officer knows and the more he has in him to teach, the less formal and impatient he will be.

The Cavalry School

New Academic Building

THE Academic Division of the Cavalry School is comfortably housed in its beautiful new building. This structure was started in 1938 and completed on the first of June, 1940. It was constructed from the whitish-gray limestone quarried on the Fort Riley Reservation and its architecture plus its location makes it a distinctive addition to the appearance of the old Cavalry Post.

The picture does not show the complete extent of the building as it is only a front view. Extending to the rear are three wings. The second floors of the flank wings contain classrooms and the first floors and basements contain classrooms and storage rooms. The center wing houses the beautiful new auditorium with a seating capacity of 250.

In the gable over the front entrance the Cavalry School insignia has been reproduced in limestone and makes a very imposing identification. Just over the front door on the porch, included within the six square columns of limestone, there hangs a beautiful wrought iron lamp holding a cluster of electric lights which at night provides most effective lighting for the entrance to the building.

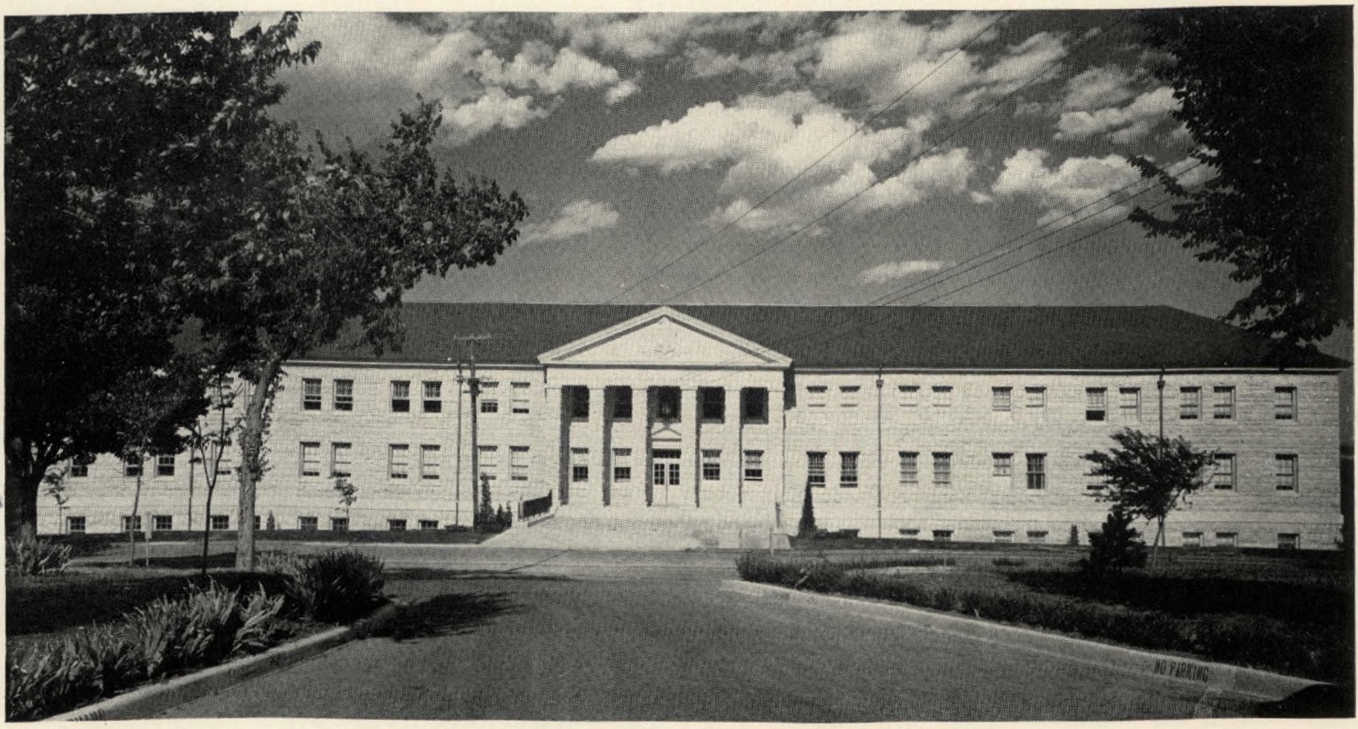
The interior of the building is finished in accordance with the most modern standards. The floors of the hallways are Terrazza marble, while the floors of all offices and classrooms are covered with deep brown heavy linoleum. The walls between the offices are a new steel, movable, sound-proof type. The offices are spacious, yet not over-large; while the classrooms are roomy, spacious and perfectly ventilated and lighted. The interior of the building is finished in a buff which materially brightens the surroundings.

The location of departments and sections in the new Academic Building are as follows:

The first floor contains the offices of the Department of General Instruction and Publications, Department of Horsemanship, the Cavalry School Library, the Book Department Store, a Student Assembly Room, the Information Office, the Reproduction Section, and Cloakrooms for Students.

The second floor contains the Administrative Offices including the Assistant Commandant, the Secretary, the Assistant Secretary, the Chief Clerk, Instructors' File and the stenographic pool. The offices of the Department of Tactics are located on the second floor. Three rooms are assigned to the Cavalry Board.

The auditorium is beautifully finished, with rows of seats sloping toward the stage which contains a modern motion picture screen. Each seat has a small folding arm table on which notes may be taken. The windows of the auditorium are hung with deep green draperies which match the stage curtains as well as the leather upholstering



New Academic Building, The Cavalry School, Fort Riley, Kansas of the chairs. The floors of the auditorium are covered with a deep green carpet.

The Department of Weapons is located in one wing of the basement while the remainder of the basement is devoted to storerooms, classrooms and a barber shop.

The heating plant for the building is located in the basement of the center wing.

The grounds around the outside of the building have been landscaped and a beautiful covering of grass has grown over the entire area. This, with the evergreen shrubs and trees, adds to the dignified appearance of the building.

The Cavalry School has long needed a home for its academic activities and the new building has amply provided that need. The pleasant surroundings and beautiful equipment add considerably to the morale of instructors and students and heighten the general tone of Cavalry School activities.

Courses at The Cavalry School, Fort Riley, Kan.
(Effective December 16, 1940)

COURSES	*DATES*	*MAXIMUM STUDENTS EACH COURSE*
Basic, Horse and Mechanized (officers)	Dec. 16-March 8 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	120 Regular, National Guard and Reserve Officers.
Motors (Officers)	Dec. 16-March 8 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	20 Regular, National Guard and Reserve Officers.
Communications (Officers)	Dec. 16-March 8 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	20 Regular, National Guard and Reserve Officers.
Refresher Course (Field Officers)	Dates to be submitted later.	Maximum of 25 Regular, National Guard and Reserve Officers.
Noncommissioned Officers	Dec. 16-March 8 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	100 Regular and National Guard Noncommissioned Officers.
Horseshoers	Oct. 14 - Jan. 4 *Jan. 4-March 17 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	*60 from units at Fort Riley. After Mar. 17, 1941, 75 enlisted men Regular Army and National Guard.
Saddlers	Oct. 14 - Jan. 4 *Jan. 4-March 17 March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	*25 students from units at Fort Riley. After March 17, 1941, 25 enlisted men from Regular Army and National Guard.
Motors (Enlisted Men)	March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	100 Regular and National Guard enlisted men.
Communications (Enlisted Men)	March 17-June 7 June 16 - Sept. 6 Sept. 15 - Dec. 6	100 Regular and National Guard enlisted men.

Cavalry Instructional Methods

By Major Wesley W. Yale, Cavalry*

As 1940 draws to a close the problem of training another army of selective trainees daily becomes more acute. Our ideas of what is essential and what is "less essential," to a rapid training program, have been considerably clarified. But the problem of who is to do the training remains formidable. Junior leaders must be developed. They must be made aware of what constitute training essentials. And they must be trained to impart these essentials to their troops and platoons in the shortest possible time, for, until a reasonable proficiency in fundamentals is attained, the training of larger units and staff personnel, must be deferred.

Part of the task of training our future corps of junior cavalry leaders has already been begun by the Cavalry School; in the form of a series of special one-month and three-month courses for officers and enlisted men. For the former, a schedule was made up as follows:

August 7-Nov. 7: 39 newly commissioned officers taking the Basic (Horse and Mechanized) Course.

Sept. 15-Dec. 15: 80 Lieutenants, all components, Basic.

Dec. 16-Mar. 8: 120 Captains and Lieutenants, all components, Basic. This course to be repeated for the same number and class of officers March 17-June 7, 1941.

(Dates later): 25 Field Officers of the Regular Army and National Guard. Refresher Course. Refresher Course to be repeated.

In addition to the Basic and Refresher Courses, there are courses in Motors and Communications for officers. A Saddlers' Course, a Horseshoeing Course and a course similar to the officers' Basic Course are available for enlisted men of the Regular Army and the National Guard.

A brief description of the Basic Course as it relates to the subject of Attack may be of interest. Of course, in addition to Attack, a proper proportion of time is devoted to other essentials. But these correspond in principle to the Attack Course, so that a detailed explanation of the latter will give a good idea of the scope of the entire course.

Prior to the inauguration of these courses, the Commandant directed that practical work supersede so-called theoretical instruction wherever possible; that emphasis be placed upon the EXECUTION of troop movements rather than upon a detailed study of the plans and orders incident to movement; that the student deal principally with small units instead of with regiments and brigades.

This meant that for Attack instruction, in particular, students would be taken out on the ground and shown in minute detail the methods of controlling the platoon and troop during an advance to an objective. It meant also that while accenting control methods for horse cavalry, the application of similar methods to armored troops and foot troops must be brought out. Finally, it meant that the students must be taught the relative importance of the subjects taken up in order to assist them to distinguish the "essential" from the "less essential."

PRINCIPLES

The Tactical Department therefore bases its attack instruction on the following principles:

1. Information of the enemy on which the attack of platoons, troops and squadrons were formerly based is too sketchy in the field.

2. The squadron, the troop and the platoon should concern themselves only with the advance to a terrain objective. In practice, if this objective is held by a superior force, adjacent units will penetrate weaker hostile positions and assist by flanking action the unit which has been checked. This principle follows from the fact that if our own brigade or division is sufficiently superior to the enemy to warrant an attack at all, most elements will succeed even though some others may be checked. Our troop or platoon therefore advances on an assigned objective, regardless of the enemy strength thereon.

3. The Estimate of the Situation is valuable and should be taught, as always, to promote logical thought. But its teaching forms a part of General Instruction. Applied to offensive operations in the field, the Estimate of the Situation invariably simplifies itself into:

(a) A mission of movement to a terrain objective. (MISSION)

(b) A study of terrain in which covered routes of advance, and intermediate objectives which permit control to be regained thereon, are the principal concern. (TERRAIN)

(c) The extended order drill formations best suited to the routes available. (POSSIBLE PLANS)

(d) The means of coördinating the advance. (POSSIBLE PLANS)

(e) The decision, therefore, sums up as a move to a certain place, by a certain route, in a certain formation, and based on another movement made by an adjacent unit.

Cavalry School Develops Cadre of Instructors

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*Faculty member, The Cavalry School.

4. Plans and orders for attacks of units of any size involve only, (a) the organization of the command into a main attack force, a secondary attack force and a reserve; (b) the assignment of objectives and routes thereto in each force, and (c) the means of coördinating the attack of all groups. Initial organization of these forces is considered tentative, with interchange of units being made as the attack progresses. In the case of the troop and platoon, the difficulty of lateral movement under fire makes the organization for attack practically inflexible.

INSTRUCTION

A detailed description of the course, begins with the conference on *General Principles of the Offensive*. In this two-hour conference the student is first given an outline of the instruction to be taken up. The principles on which the Tactical Department based the instruction, and which have already been described, are explained; it is strongly emphasized that troop leading is the major objective. The remainder of the period is devoted to an explanation of the terminology of the different types and phases of the offensive.

In this connection much of the confusion of terms which has long existed in textbooks has been eliminated at the school. For example, "pivots of maneuver," "secondary pivots," "fire support echelons" and other terms have been discarded. Units are organized only into *main attack forces, secondary attack forces, and reserves*.

For horse cavalry units, great stress is laid upon mounted maneuver, to be habitually followed by dismounted attack. The value of mounted attack on favorable terrain where surprise is present is pointed out to the student, especially for use in pursuit operations. However, all practical work is dismounted except for the approach phases of action.

Excerpts from Intelligence reports are on hand indicating that the attack methods taught in the school have been successfully applied by German troops in the Polish Norwegian and French campaigns. These reports are read to the students to give them confidence in the instruction they are receiving.

USE OF COVER DURING FORWARD MOVEMENT

In the first two Refresher courses this one-hour practical exercise included a demonstration by troops of the garrison. However, it has been found by giving instruction direct to students, who wear fatigue clothes for this and all other dismounted exercises, better and speedier results can be attained.

The class is taken out on the ground, where a brief explanation of the methods of selecting covered routes of advance by dismounted scouts is given. The diverse choice of routes open to scouts is contrasted with the restricted zones of advance imposed upon individuals who are advancing within a squad.

After explaining methods of crossing open ground, several students are selected to demonstrate this operation and their efforts are given frank criticism by the instructor and fellow students. The technique of crawling with rifle and machine gun is also shown.

Two covered routes to an objective are selected and one squad of students assigned to each. The class then moves forward to the objective and observes the student squads in their advance along the routes indicated.

When this movement has been completed, the instructor moves the class to a nearby plot of ground which affords an opportunity to demonstrate the approved manner of taking cover while observing, or firing, and of employing background for concealment.

Following this a selected squad of students is drilled in the movements required of an individual preparing for a squad rush.

The period closes with a few students making an advance over a small patch of rough ground, and with the remainder of the class observing and criticizing the performance.

Students are impressed throughout with the importance of thoroughly drilling all combat troops in the use of cover. They are given advice on the best method of conducting instruction of this type during all phases of the average troop or squadron training program.

EXECUTION OF MOUNTED APPROACH FORMATIONS AND HASTY DEPLOYMENTS

In this one-hour period the class is placed on high ground while garrison troops demonstrate below and at a distance from the class. The idea is to prevent the actions of an individual trooper from diverting the attention of the class from the performance of the group as a whole, and from the actions carried out by the leader.

The application of drill formations to different types of terrain is explained. The ability of the platoon commander to effect immediate deployments of his platoon is shown to depend upon the rapid movement and alertness of squad leaders.

The platoon leader is shown launching his platoon into action by successive squads and attention is called to the need for personal mobility on the part of the leader in carrying out this movement. At this time, too, is stressed the capability of a cavalry leader, mounted or in a motor, to move rapidly from one element to another, in a command of any size, and personally to assign objectives to subordinates.

This period is followed by two 3-hour mounted drill periods in which the class is put through the formations and movements taken up in the demonstration. At the same time, by means of a mobile public address system, the instructor corrects the performance of student leaders. Bad habits are corrected. For example, a tendency to permit rear squads of platoons to lag behind when the unit moves out, or increases the gait, is noted. A strong effort is made to impress as many small, practical points of troop leadership upon the class as possible.

In all practical exercises criticism of student leaders is offered in a friendly and constructive manner. Leaders are rotated frequently so that all have at least one opportunity to handle the class, or a major part thereof, during the course.

Incidentally, for administrative purposes classes are permanently organized into platoons of three squads of five or six men each. A platoon leader and two messengers make up platoon headquarters.

THE PLATOON IN THE DISMOUNTED ATTACK

This subject is taken up in three 3-hour practical exercises.

In the opening period the students are given an idea how an untrained group of twenty or thirty men can be quickly taught to execute a dismounted advance to an objective while under fire, without having any more military knowledge than the ability to fire a rifle.

The instructor "cuts out" seven or eight men from the class and appoints one of them leader. He directs this leader to walk his group over to a nearby bush or large rock some thirty yards away.

While the group moves out, similar instructions are given over the loudspeaker to a second group, except that they are told to move to a spot on a line with the first group and about fifty yards to its left. A third group is sent to a bush or stump about fifty yards to the right of the first group.

The instructor then explains that the three groups, in walking to the points indicated, have actually carried out a tactical movement. While they moved slowly and were bunched, nevertheless they could be considered as three units which had advanced to objectives in response to the will of a superior commander.

It is explained that if a similar movement could be carried out with individuals spread out at intervals, the vulnerability to enemy fire, so apparent in the first movement, would be much less apparent.

Accordingly, the groups are brought back to the starting point and the group leaders are directed to again conduct their groups to the points indicated, but to have the men "spread out" so that there will be about five yards between individuals during the advance. Attention is called to the fact that the movements are being executed without any reference to standard military expressions or commands.

The groups are led to the objectives a second time and the class is directed to note that the effect is exactly the same as though the command "line of squads, as skirmishers" had been given.

On completing the movement, groups are again brought back to the starting point. The class is then told that the only thing lacking in making an advance of this type is the matter of individual cover. So the group leaders are directed to take their groups to the points indicated for a third time, but to advance not only "spread out" but with each man "sneaking" along the ground, crawling or jumping from cover to cover.

The third try invariably gives a very good impression to the class of the simplicity with which the movement was planned and ordered. The class is also impressed with the importance of designating terrain objectives, being shown that such designation has just enabled a force the size of a platoon to advance in a formation suited to enemy fire, without the use of any known military commands or terminology. The application of the exercise to the training of selectees is at once apparent.

It is then explained that the only thing necessary to make this movement perfect is the polishing up of the squad methods of advance and the institution of platoon control methods which will insure the ability of the platoon to advance through a series of such minor objectives, until an assault on the major objective can be made. However, the class is made to understand that "polishing up" is a long process and that the control of a platoon under fire is one of the most difficult and hazardous of occupations.

The next phase of the exercise takes place on a strip of ground which provides three distinct lanes, each the width of a deployed squad, leading to a series of low hills. The center lane is crossed with a series of shallow ditches at intervals of 40 yards or less. The left lane is spotted with small sand dunes, brush and bunch grass. The right lane is crossed with transverse ditches like the center lane, but at one point levels out so that bare, smooth ground extends for about 100 yards to the front.

This strip of ground is used to demonstrate the different methods of advancing squads under fire, according to the type of terrain. By means of the loudspeaker, one squad of students is drilled in advancing by infiltration in the left lane while the others observe. The center lane provides a demonstration in advancing by rushes, while in the right lane the student squad is taught to advance by rushes until the open ground is reached, whereupon the squad "side-slips" into the zone of an adjacent squad which does provide cover.

The final phase of the exercise conducts the student platoons, under student leaders, through an entire dismounted advance along the lanes used for the squad demonstrations and directed against the low hills as a platoon objective. The loudspeaker provides a most effective means of closely controlling the entire movement from the standpoint of the instructor and of providing instruction for observers and participants alike.

The first student platoon makes a dismounted approach march to a certain point during which instruction is given in handling a dismounted covering detachment. At this point, assumed to be that at which enemy fire becomes effective, the student platoon leader assembles his squad leaders under cover, designates the platoon objective and the first intermediate objective, and directs the squads to advance through the lanes used for the squad demonstrations.

In the meantime another student platoon is following in close support of the first, and conforming generally to its movements. When the leading platoon arrives within assaulting distance of the objective, the methods of making this assault, and the importance of having the support platoon arrive on the objective in time to be of value, are explained over the loudspeaker. The platoons make the assault and immediately reorganize, which terminates the exercise.

Throughout the advance, the ease with which squads may become lost or confused is made apparent. The mobility required of the platoon leader, and his headquarters personnel, in supervising the movement and in maintaining contact with the rear, is stressed. As is done in German Army training, the use of messengers is purposely overemphasized.

The two succeeding 3-hour periods conform to the last phase of the initial period of dismounted platoon work. Student platoons are required to advance on different objectives, on varied terrain, and to base their movement on adjacent platoons. Control over two or three platoons is relatively easy for an instructor using a mobile loudspeaker. Throughout these exercises, students are not required actually to take cover, but run from one covered position to another and remain standing.

THE TROOP IN MOUNTED, DISMOUNTED, AND COMBINED ACTION

This is a two-hour demonstration by garrison troops, followed by one hour's conference on the points observed in the demonstration. The students are placed on high ground (Republican Point) overlooking an apparently flat plain (Republican Flats); the plain, however, actually is the rough ground over which the preceding dismounted exercises have been held.

A war-strength troop is shown making a mounted approach and the action of the commander in controlling the covering detachment and the main body is pointed out to students. Formations of the main body and other pertinent points of the approach march are discussed as they occur.

At a given point the covering detachment is assumed to come under fire. It is explained that the situation is one requiring mounted action by the troop. Platoons are launched successively to the attack and the actions of the troop commander and his light-machine-gun officer are especially noted.

After the reorganization the troop returns to the point at which the approach terminated in the previous advance. It is now explained that instead of a situation requiring mounted action, a situation requiring combined action exists. The troop makes a combined attack and students' attention is directed to the movements of the troop and platoon commanders, the use of the light machine guns and the measures taken to coördinate the main and secondary attacks. Time is taken to discuss the difference in enemy attitude as well as other factors which might call for combined action instead of purely mounted or purely dismounted action.

On concluding the combined attack, the troop returns to its initial point and goes through a purely dismounted attack over the same ground. Various individuals in the class are frequently questioned as to what they would do to carry out the necessary movements going on and a discussion is held as to the various circumstances under which each type of attack might take place.

In the demonstration, the distance between the main and secondary attacks is made purposely extreme to give the students an idea of what "supporting distance" is. Smoke is used in the combined attack and the purely dismounted attack to show its screening effect.

The class is kept at a distance from the troops to give a better impression of the entire movement, rather than distracting attention from the movements of the leaders to those of less essential personnel.

Following this period the class has a three-hour practical exercise in which students carry out the movements shown in the demonstration, with particular attention being given to the execution of mounted approaches and the organization of the command into a main attack force, a secondary attack force, and a reserve.

ILLUSTRATIVE PROBLEM

Thus far in the course, the attention of the class is directed to the execution of the fundamental movements of the platoon and troop. Reference has been made to supporting arms, but little has been said about the measures needed to coördinate the various members of the regimental team.

While it would be desirable to conduct instruction in the coördination of regimental weapons in the field, the fact remains that the picture presented is too large to be assimilated. The execution of an attack by an entire regiment requires too much ground, and more than a mere handful of students is too unwieldy a group to move from one point of vantage to another. To spread students through a regiment in various points of observation fails to give any one student more experience than he has already gained in carrying out the movements of small units.

Therefore, in giving instruction in the coördination of regimental weapons, recourse is had to an illustrative map problem given in the classroom. The problem requires four two-hour periods in which every phase of attack, *from the viewpoint of the junior officer,* is taken up.

In the first period the regiment is shown making an advance against an indeterminate enemy, in other words an advance against a terrain objective. In accordance with the principles laid down by the Tactical Department, the enemy situation is minimized, the stand being taken that cavalry troops will usually operate against mobile forces and must therefore expect to change the organization of attack forces in accordance with a changing situation as the attack progresses. Students are encouraged to ask, from time to time, questions on "What would happen if the enemy did so-and-so?"

The first period shows the initial stages of the mounted approach and the organization of the regiment for the attack. The activity of the regimental commander and his staff is shown in dividing the regiment into columns, employing scout cars and other reconnaissance elements, and in coördinating the advance of the columns.

The second period takes up the control of one of the columns and shows its progress through the different stages of the attack.

The third period deals with the employment of the machine guns and special weapons throughout the attack.

The fourth period shows the conduct of a given troop and platoon through the dismounted approach, the fire fight and assault. Students are impressed with the fact that control by the regimental echelon is at peak importance during the approach and the organization of the command for combat. Between this point and the line of departure the squadron commanders take charge. On the line of departure and during the fire fight, the troop and platoon commanders are on their own, until the objective is gained or until a check throws the whole matter back into the laps of regimental headquarters.

Students are provided with a booklet of charts, which follows schematically the formations adopted by the regiment in the illustrative problem, together with certain variations in these formations which might be assumed in different terrain.

FIELD EXERCISE

The course in Attack ends with a four-hour field exercise in which students are scattered in key positions through a reinforced squadron of garrison troops which has been placed on a line of departure prepared for a dismounted attack. The instructor acts as squadron commander and also as chief control officer. As squadron commander he issues orders for movement to terrain objectives, while as chief control officer he gives instructions to troop umpires, who restrict forward movement both in response to the orders of the chief control officer and upon their own initiative. The instructor employs a mobile loudspeaker to issue orders and to call attention to certain movements being made which might prove instructive to observers.

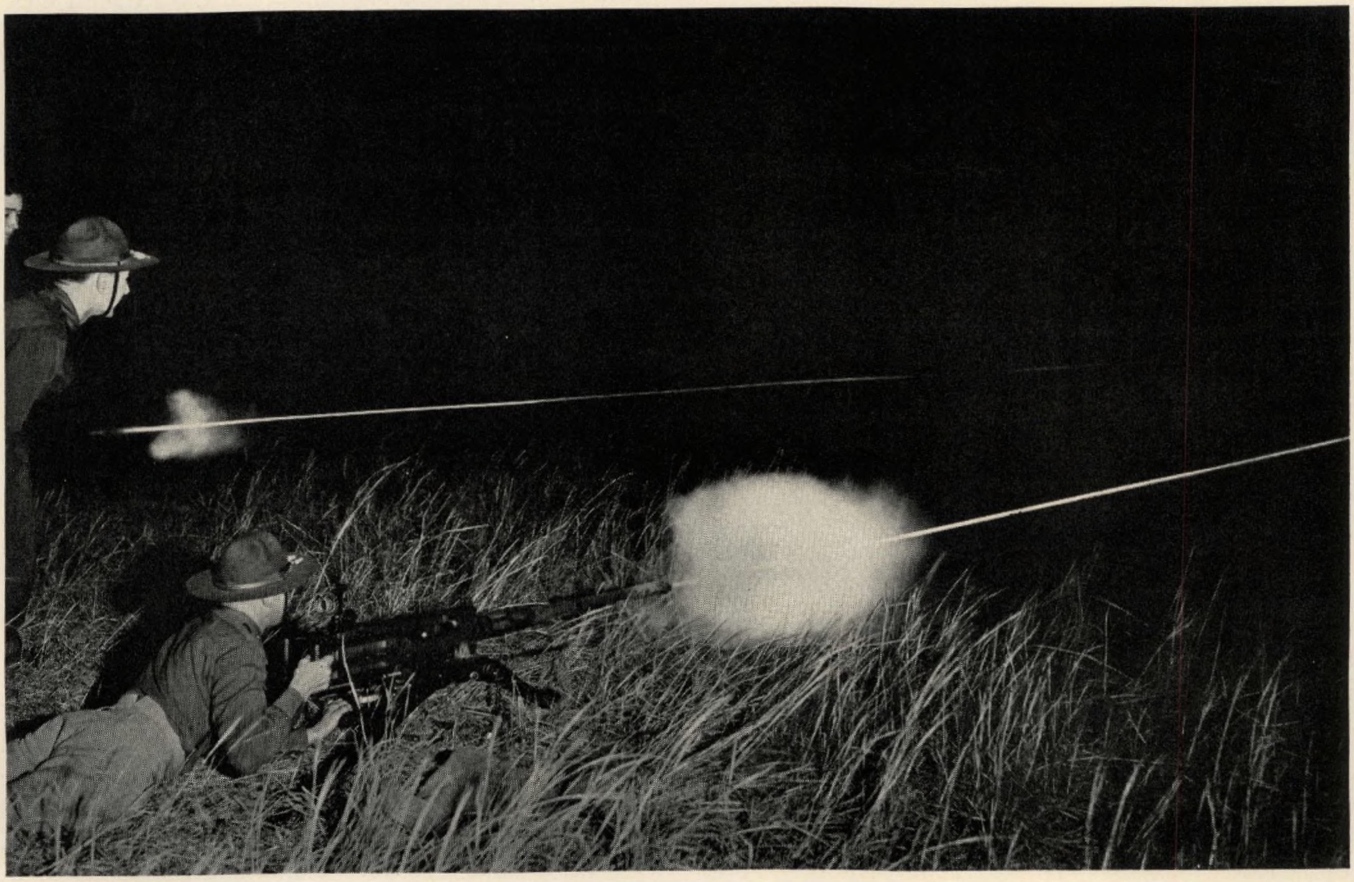
TEST

Students are tested as to what they have learned of the essential features of the course. The system employed is that of issuing a paper with printed questions, to which several answers are appended. The student is required only to underline the proper answer. Several "situations" are generally given, as well, each with several solutions from which the student may choose.

* * *

The Attack course is only one of several, in which Defense, Reconnaissance, Weapons, and other subjects are given due attention. But the scope of the course just described will give a general idea of what is being attempted in the one- and three-month periods available.

It is believed that results of a practical nature are being accomplished and that students will be returned to organizations with a satisfactory knowledge of fundamentals which should save their superiors in the regiments a great deal of instructional time.



Night instruction, The Cavalry School

Notes From the Cavalry Board

"The Cavalry Board invites any individual, whether or not a cavalryman, to submit for consideration constructive suggestions or ideas relating to new equipment, improvement of standard equipment, or to any problem or project under study by the Board. The Board will also welcome suggestions as to new problems that may properly be considered. Communications should be addressed to the President, Cavalry Board, Fort Riley, Kansas."

Manual for Horseshoers:—Preparation of a new manual for Horseshoers, Technical Manual No. 2-220, has just been completed. The Cavalry Board has endeavored to make this manual complete, so that the horseshoer will have in one document all necessary information for his specialty, and so that the manual can be used, as a text in regimental and other horseshoer's schools. With this idea in mind, some of the important and necessary subject matter which had been contained in TR 360-25, but was rescinded by *FM* 25-5, although not republished in that or any other document, has been incorporated in the new manual. On the publication of the new manual, general information concerning the shoeing of animals which is important and necessary to all commissioned and enlisted personnel having to do with the care of public animals, can be found in *FM* 25-5. While detailed information and instructions, concerning the shoeing of animals and care of their feet, important and necessary for the horseshoer will be found in the new manual.

Spotting Charge for 81-mm. Mortar:—Tests were recently completed by the Cavalry Board of a high explosive shell, M-43, for the 81-mm. mortar which contains a small capsule of smoke to aid in spotting. Apparently the inclusion of the smoke capsule does not change the ballistics of the shell, nor does it materially reduce the effect of the explosion. Tests indicate that the additional smoke charge is of considerable assistance in spotting. Observers are able to locate bursts in defiladed areas where the standard shell burst cannot be seen.

Sub-Caliber Device for Light Machine Guns:—The Cavalry Board is testing a sub-caliber device for the machine gun, M1919A4. This device which is very similar to the newly developed caliber .22 machine gun trainer, M-3, for the water cooled gun, is capable of being assembled to the light machine gun without the necessity of modifying the gun. It provides a means of firing caliber .22 ammunition under conditions that practically duplicate the firing of caliber .30 ammunition. It is easily assembled in the gun and tests indicate that it is subject to but few failures to fire, as compared with the caliber .22 machine gun, M-1.

M-1 Rifle Clips:—The Cavalry Board has recently completed a short test of M-1 rifle clips which have been zinc plated to resist corrosion. These clips are identical with the standard clips except for the coating of zinc. Limited tests indicate that they are a decided improvement over the standard clips.

Operation in Snow and Extreme Cold:—How deep is the snow that can stop horse cavalry? And what are you going to do with your scout cars and motorcycles? Or how many cavalry officers have bivouacked in temperatures hovering around forty degrees below zero; or twenty degrees below; or even twenty degrees above, for that matter? The answers to these questions, and more must come and they must come the hard way—will be by getting out and rubbing our noses in the snow. Since the days when the United States Cavalry ceased to patrol such places as Yellowstone National Park it has become largely a southern border patrol—border rats—softies. And if it were not for the recent bout between the polar bear of Finland and the big brown bear of Russia perhaps we would still be giving the matter hardly a shivering thought. It is surprising how meager is the information on the technique of operating in deep snow and extreme cold. Even in our most northern posts we find it is quite customary for the troops to hibernate and the data they can give on soldiering in the open are sadly incomplete. A recent study made by the Cavalry Board on this subject has revealed how little we know of caring for men and animals, of marching, of supply, or of methods of combat in snow and extreme cold. To test means and methods of operating in the winter in northern climates it is anticipated that certain elements of cavalry will be given the privilege of pioneering in this field of work this winter and from their experiences we hope to glean useful information. The God of War is no sissy nor respector of persons, latitudes nor modes of transport.

Mobilization Training Programs:—With the preparation of mobilization training programs for the three new cavalry troops—Antitank Troop, Cavalry Division; Weapons Troop, Cavalry Brigade; and Combat Car Troop, Reconnaissance Squadron, Cavalry Division—the Cavalry Board has, for the moment, caught up with the needs, in this respect, of our modernized arm. As our readers probably know, the plan for training individuals at Enlisted Replacement Centers (as distinguished from Unit Training Centers) now contemplates instruction in basic cavalry subjects only. Consequently training programs for specialists at these replacement centers have been withdrawn and replaced by basic training programs.

Machine Gun Mounts for Train Defense:—Encouraging results have been reported by the 2nd Cavalry after its test of the use of platform mounts for machine guns in connection with train defense. Four trucks were equipped with these platforms and taken on maneuvers this past summer. The platforms are six feet square, fenced in by a safety rail about ten inches above the floor, and mounted above the cab of the driver. While many proposals have been submitted to the Cavalry Board during the last ten years or so, and a number of them tested, each has had to be discarded because it either failed to provide all-around fire against both ground and aerial targets, or the weapon was not instantly available, or by its use too much cargo space had to be sacrificed. While the Board is still waiting for two ring type of mounts to be delivered for test, this platform mount is being developed to be used on trucks now in service or on new trucks not otherwise equipped for mounting antiaircraft and antimechanization weapons. This means was designed to meet the following characteristics:

a. Method must be applicable to all types of trucks.

b. The means of mounting the gun should be sufficiently simple and inexpensive to be readily constructed locally.

c. The method should require no structural changes, which would complicate or delay manufacturing problems for future procurement.

d. It must permit the use of either the caliber .30 or caliber .50 machine gun.

e. It must permit the gun to be carried set up continuously and ready for instant action.

f. It must permit the gun to be manned continuously.

g. The gun must have a full field of fire, both ground and aerial, with 360 degrees of traverse.

h. The method should permit the use of the standard mount without the use of adapters or special equipment. (This is an initial requirement only, so as to permit its immediate use and is not intended to restrict subsequent development of special mounts or adapters if warranted.)

i. The method of mounting and of operating the machine guns on trucks must not curtail cargo space.

Tandem and Buddy Seats for Motorcycles with Sidecars:—The Cavalry Board has recently completed a study of the best method of transporting three people on the motorcycle with sidecar. Due to the fact that tricycles will not be available for issue for sometime, there is a definite need for some means of transporting the personnel of the tricycle troop as now organized. At present no tandem seat has been devised that does not cause a shift of the center of gravity. This makes steering difficult and puts excessive strain on the rear wheel of the vehicle. A specially designed buddy seat has been found that is comfortable for both siders, does not change the center of gravity, and causes the minimum strain on the rear wheel. With the use of this seat two men can ride the motorcycle with the third man in the side car, thereby transporting the same personnel as will be carried on the tricycle. However, the Cavalry Board realizes that this should be only a temporary means for transporting three people for the same reason that two men are not regularly mounted on one horse. Consideration is being given to the use of a light commercial car chassis as substitute equipment until the tricycle is available.

Revision of Tables of Basic Allowances:—A study was made and recommendation submitted to the Chief of Cavalry's Office for changes in the Tables of Basic Allowances. Needless to say many ideas were uncovered on what we should have in the field and what we should not have.

In addition to those mentioned above, the following subjects are undergoing test or study:

Airplanes for Short Range Liaison.
Modification of Horse Equipment.
Strip Films for R.O.T.C.
New Type Shelter Tents.
Low Quarter Shoes.
Modified Canteen Cover.
Radio Needs for Cavalry.
Over the Shoe Boot.
Antitank Weapon (37-mm., Antitank Gun, M-3).
Pull-type Single Shot Auto-fire Trigger Mechanism for Browning Machine Gun, Caliber .50, M-2, HB.
Equipment for Motorcycles.
Development of New Vehicles for Cavalry.

☆ ☆ ☆ ☆

In my opinion, we owe the happy results of our battles and campaigns much rather to our work in time of peace than to chance or to the brilliant inspirations of some genius.

—Prince Frederick Charles.

Motor Vehicle Maintenance

By Captain Jesse B. Wells, Cavalry*

IN discussing the subject of maintenance of military motor vehicles, I propose to include:

1. The *prescribed* system; i.e., the system as prescribed in current regulations.

2. The *system generally used;* i.e., the system actually followed, insofar as it has come within my limited observation, in the Cavalry.

3. *Corrective measures;* i.e., the steps necessary to make it work, and suggestions for desirable changes in the basic set-up.

THE PRESCRIBED SYSTEM

The system of motor vehicle maintenance for the Army is prescribed in Section III of AR 850-15 and is further amplified in Chapters 2 and 5 of FM 25-10.

Its essential features are as follows: There are two principal subdivisions of maintenance, namely: *Organizational maintenance* and *service maintenance*. It is with the first of these—organizational maintenance—that we in the Cavalry are primarily concerned.

Organizational maintenance is normally performed by the personnel of the organization to which the vehicle is assigned. In the Cavalry, it is that maintenance performed by personnel of Cavalry units and organizations.

Organizational maintenance is subdivided into two echelons, viz: First echelon, or drivers' maintenance and second echelon, or mechanics' maintenance. The *primary* function of both of these echelons is *preventive maintenance*—the type of maintenance which *prevents* breakdowns on the march—*not* the repair of breakdowns after they occur.

First echelon maintenance includes preventive maintenance functions within the ability of and equipment available to the motor vehicle operator. Definite maintenance duties should be assigned the motor vehicle operator and he should be prohibited from performing any maintenance function not specifically assigned. (AR 850-15.)

Briefly, these maintenance duties include: Inspection, limited lubrication, tightening, servicing, cleaning, avoidance of vehicle abuse, and the performance of emergency adjustments and repairs. (FM 25-10.)

The possession of a motor vehicle operator's permit should be a guarantee that the individual is qualified in these duties. AR 850-15 prescribes: "Motor vehicle operator's permits will be issued only to individuals who have satisfactorily passed an examination conducted by a qualified commissioned officer covering the following subjects:

(1) Mechanical—Nomenclature and functions of major units of the motor vehicle.

(2) Operation—

(a) Actual driving of the vehicle, involving use of controls, reversing, and parking under usual conditions of traffic and terrain.

(b) Traffic regulations, road procedure, safety precautions, speed limits, and vehicle abuse.

(3) Maintenance—First echelon (vehicle operator's) maintenance."

However, the fact that the driver is qualified to perform first echelon maintenance is no assurance that it will be performed. This can only be accomplished by rigid supervision and inspection on the part of the officers and noncommissioned officers in charge of operation of the vehicles.

Second Echelon Maintenance includes *preventive maintenance, minor repairs,* and *unit replacement* within the limits of time available, utilizing hand tools and light portable equipment provided in Tables of Basic Allowances (AR 850-15). *Minor repairs* include repairs which in general can be made without dismantling the unit. *Unit replacement* consists of the removal of an unserviceable unit from a vehicle and its replacement by a serviceable one. Manifestly the extent of the operations listed above is limited by the tools available, the capabilities of the personnel, the supplies or parts furnished, and the time available. *Preventive maintenance* is the most important function of the second echelon. It is accomplished by the performance of scheduled maintenance operations and inspections based on time, mileage, or a combination of both. Its successful accomplishment requires careful planning and strict supervision by officers concerned. In general, scheduled maintenance operations may be divided into five classifications as follows:

a. Daily.—Consists of inspection, cleaning, servicing and tightening performed by the driver, and emergency repairs performed by the mechanics.

b. Weekly.—Consists of a continuation and check of the drivers' daily maintenance as well as the care of tools, equipment, tires and batteries. Condition of vehicles and type of operation may make it advisable to include certain other maintenance operations in the weekly schedule.

c. Lubrication.—Lubrication should be performed in accordance with the manufacturer's instructions for each type of vehicle. This may be performed on a mileage or time basis, but, in either case, a definite schedule should be prepared and rigidly adhered to.

d. Monthly (1,000 mile).—This scheduled maintenance operation is performed by the troop mechanics under the supervision of the Motor Sergeant. It includes a thorough inspection, tightening, adjustment and repair of the units of the vehicle to insure that it is in satisfactory condition to be operated for another month or 1,000 miles.

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*Faculty member, The Cavalry School.

A Motor Park (Administrative)

Repairs beyond the scope of the second echelon should be requested of the higher echelons.

e. Semiannual (6,000 mile).—This maintenance operation is normally performed by the regimental second echelon maintenance section. Where there is no separate regimental maintenance section, it is performed by the troop mechanics. It is similar to the monthly operation but more extensive in scope. All accessory units and certain other units are disassembled, cleaned, inspected and lubricated. They are repaired or exchanged if necessary. The performance of this maintenance should assure reasonable vehicle service for the next six months provided the monthly maintenance is properly performed.

Service Maintenance is normally performed by Ordnance or Quartermaster maintenance personnel. It is subdivided into two echelons: third echelon and fourth echelon.

The third echelon maintenance is performed by Quartermaster and Ordnance maintenance companies. These are highly mobile units whose chief functions are: supply of units and parts; unit replacement beyond the scope of second echelon; major repairs; and evacuation.

The fourth echelon consists of fixed shops established in conjunction with unit and parts supply depots. Its functions are: supply of units and parts; general overhaul; reclamation; and emergency manufacture of parts.

The key feature of the whole system is "Unit Replacement." If a unit or sub-assembly of a motor vehicle requires repair it is much more economical in time and labor to simply remove it from the vehicle and replace it with a serviceable one. For example—to remove a carburetor from an engine, disassemble, clean, inspect and repair it might take two or three hours, whereas it could be removed and replaced by a serviceable one in a few minutes. Furthermore, it would be impracticable for second echelon sections to carry a stock of small parts for every unit on the vehicle, but it *is practicable* to carry sufficient serviceable units to take care of reasonable expectations. An added advantage is the fact that units can be repaired more efficiently in camp or bivouac by specialists equipped with proper tools than by general mechanics with insufficient tools and parts working on a vehicle parked by the roadside.

This system of "unit replacement" is not peculiar to the army. It is an essential feature of the maintenance system of many commercial fleet operators. Spare units, such as engines, generators, starting motors, carburetors, etc., are kept in stock so that a defective unit can be quickly replaced and the vehicle "laid up" for a minimum length of time. Then the defective unit is repaired and placed in stock for replacement use. Similarly, the "scheduled maintenance operations" prescribed for first and second echelon maintenance organizations is in accord with sound commercial practice. All fleet operators of any size have a similar system—with one marked difference—their scheduled preventive maintenance is much more thorough and detailed than that prescribed for the army.

In my opinion, the prescribed system is a sound and workable one, with one exception which I will mention later. Most of our maintenance troubles and difficulties occur because the system is not followed, at least in its major features. In fact, I have never seen the system actually carried out in its entirety.

The exception which I referred to above is that feature of the system which divides the third and fourth echelons of maintenance between the Ordnance and the Quartermaster Corps. If there is any reason for this division of maintenance responsibility, it is not apparent to those of us in the operating organizations. Certainly it complicates considerably the supply of units and parts to the second echelon. The mere fact that some types of vehicles are used for combat and others for transportation or supply does not appear to justify two separate sets of third and fourth echelon maintenance establishments for their upkeep.

THE SYSTEM GENERALLY USED

Under this heading, I will present a few points concerning the maintenance system as it is actually followed in those posts and organizations with which I have come in contact.

First Echelon Maintenance.—

The maintenance duties assigned to the driver are simple, but definite, and cannot normally be separated from his duties as actual operator of the vehicle on the road. Their execution is dependent upon thorough training of the driver and constant supervision on the part of officers and noncommissioned officers in charge. In my opinion, the *training* of drivers is very much neglected. A thorough course of driver training requires from 70 to 100 hours, dependent, of course, upon the previous experience of the soldier. All too often, a driver is placed in charge of an expensive motor vehicle with little or no training except enough to assure that he can steer the vehicle and shift gears. Driver's maintenance, if any, consists only of checking oil, gas, water and air. Under such conditions, a few months' operation will find the vehicle well on the way to a general overhaul. A reasonable time spent in the training of drivers and of supervisory personnel will pay dividends many times over. The question has often been asked: "Why is it that an army vehicle is ready for the junk heap after having been operated only about 30,000 miles (during which time it has probably had at least one general overhaul)? A large contributing factor is abuse on the part of the driver and lack of driver maintenance.

Second Echelon Maintenance.—

Minor repairs—Most maintenance sections will take care of such emergency minor repairs as they are authorized to make, provided they can obtain the necessary parts. It is the exception rather than the rule when they can actually get these parts from the third echelon shops without a great deal of delay, often of several months. Meantime, the continued operation of the vehicle with a defective part has probably caused failure of some major unit.

Unit replacement—Very seldom is the second echelon shop furnished with *replacement units* by the third echelon. This essential feature of the maintenance system is almost wholly neglected. Instead, a vehicle will be laid up for a considerable time waiting for some small part when, if a replacement unit had been available, it could have been kept in operation with only a short delay.

Scheduled maintenance—The scheduled maintenance operations are the most important phase of second echelon maintenance and also the most neglected. Systematic, thorough checking and adjustment of vehicles at intervals of 1,000 miles and 6,000 miles will go far toward prevention of roadside breakdowns. The general tendency is to treat these scheduled maintenance operations as inspections rather than as an actual maintenance job. Another faulty feature of this maintenance is the inability to get necessary parts from the third echelon. When inspection discloses that a unit or part is worn or defective and should be replaced, it usually takes a long time to obtain the necessary replacement. By that time, the unit or part has actually failed, and the vehicle is out of operation.

The lack of motor officers and mechanics trained in preventive maintenance operations is also a contributing factor to the neglect of this phase of maintenance. Too many of our mechanics are either self-trained or have been trained in mechanics' schools which did not stress this important phase. Many motor officers have had no experience or training in motor vehicle maintenance and are prone to leave the actual establishment of a system of maintenance to their Motor Sergeant. Commanding officers often fail to realize the importance of scheduled preventive maintenance and insist on vehicles being operated unless they are actually unable to run. This puts the motor officer in the position of having to defend his action in keeping a vehicle in the shop for this purpose.

Scheduled maintenance operations take considerable time if they are performed properly. Where they have not been carried out, the vehicles are usually in such bad shape that it actually takes the full time of the mechanics to care for the emergency repair work on the vehicles.

Third Echelon Maintenance.—

In actual practice, this echelon has seldom functioned in accordance with its prescribed rôle. The third and fourth echelon shops are usually combined in a single set-up on each post. As a result, the third echelon really functions as a fourth echelon shop. An adequate supply of parts is not carried in stock and vehicles are laid up for long periods of time while waiting for the purchase and delivery of parts. "Unit Replacement" is conspicuous by its absence.

Overhaul jobs and even some repair jobs take such a long time that no commercial concern could possibly operate on this basis. It is not unusual to have vehicles laid up for from three to six months for repairs which would normally be completed by a commercial garage in one or two weeks. This echelon of maintenance is further complicated by the fact that it is performed by two separate supply services, the Ordnance and the Quartermaster. These two services operate under different sets of instructions. The Ordnance will authorize Second Echelon personnel to perform certain repair jobs on ordnance vehicles whereas the Quartermaster will issue different instructions for Quartermaster vehicles and vice versa.

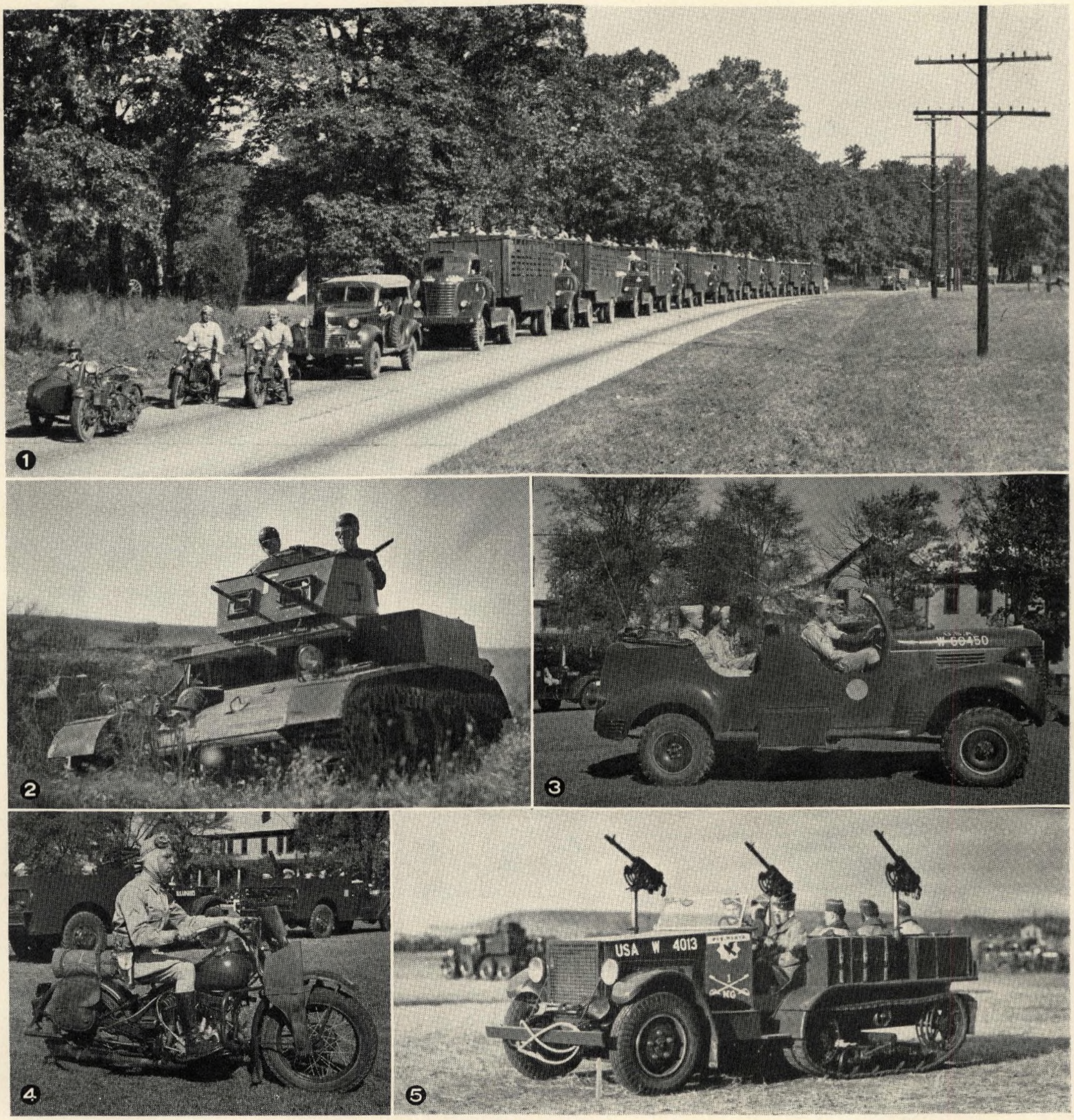
Service records, forms, procedure, etc., are not only different for the two supply branches, but also vary from post to post.

CORRECTIVE MEASURES

The following definite recommendations are submitted for consideration, both to correct faults in the system itself and to correct abuses in the functioning of the system as prescribed.

a. Driver training and driver maintenance.

Commanding officers of operating organizations should insure that all drivers are given a thorough course of training prior to being placed in charge of a vehicle. Definite duties must be prescribed and the performance of these duties must be strictly supervised.



SEVERAL TYPES OF CAVALRY VEHICLES

1—Cavalry Portée. 2—Combat car (light tank). 3—Command car. 4—Motorcycle messenger and scout car section. 5—$\frac{1}{2}$ track vehicle.

b. Second Echelon maintenance.

(1) Motor maintenance officers, motor sergeants and mechanics should be required to devote the major part of their time to preventive maintenance.

(2) Commanding officers must make vehicles available to maintenance personnel for performance of scheduled maintenance operations.

(3) Sufficient spare vehicles of each type must be provided for in tables of organization so that scheduled maintenance operations can be performed in the field without depriving the organizations of vehicles needed for combat and supply.

(4) Maintenance sections must be supplied with sufficient stock of spare parts and replacement units to take care of reasonably expected failures of minor parts or units.

(5) Adequate shop manuals and technical instructions covering all phases of maintenance for each type of vehicle must be supplied to second echelon maintenance personnel by the third echelon.

c. Third and Fourth Echelon Maintenance.

(1) The service maintenance of *all* motor vehicles, combat, supply and administrative, must be consolidated under one maintenance service, regardless of who is charged with design and procurement. A separate "Motor Maintenance Service" under the Quartermaster General would seem a logical set-up.

(2) Third echelon maintenance organizations must carry on hand an adequate stock of spare parts and replacement units for the vehicles which they are required to maintain.

(3) As a corollary to (2) above, *vehicles must be standardized*, at least in each division or similar unit, to permit the third echelon to carry adequate spare parts and replacement units without having to overload their supply trains.

(4) The "Unit Replacement" feature of the maintenance system must be utilized to the fullest extent.

(5) Records, reports, forms, procedure, etc., must be standardized for all units, posts and stations.

(6) Third and fourth echelon maintenance shops should be separate and distinct, where practicable. Where necessity requires that they be combined, third echelon functions should not be submerged in fourth echelon work.

(7) Technical information and maintenance instructions must be formulated, and promulgated to the operating organizations.

* * *

With the greatly increased motorization and mechanization of our Cavalry units, the question of an adequate system of motor vehicle maintenance assumes paramount importance. We may have highly trained individual soldiers, we may have highly trained tactical units, *but if our motor vehicle maintenance is poor, vehicular failures may jeopardize the success of an important operation.*

CHRISTMAS SEALS

CHRISTMAS
Greetings
1940

Help to Protect Your Home from Tuberculosis

CARDED

Cavalry Maneuvers

Southwest of Alexandria, La., August 17, 1940

*By Brigadier General Terry de la M. Allen**

GENERAL SITUATION (MAP 1)

Enemy—The IV Corps (Blue), in the area ALEXANDRIA—BOYCE, was preparing to move south on August 16th.

Own forces—The VIII Corps (Red), in the area PITKIN—CRAVENS, was preparing to move northeast on August 16th. The First Cavalry Division had established a counterreconnaissance screen for the VIII Corps on August 15th, along the northern and eastern edges of Kisatchie Forest—the line designated by Corps.

The VIII Corps (Red) was directed to seize crossings of the CALCASIEU RIVER between HINESTOWN (incl.) and SIMPSON (excl.).

CAVALRY MISSIONS

The First Cavalry Division was directed to cross the counterreconnaissance line at 7:00 AM, 17th August, to precede the 36th and 45th Infantry Divisions and to seize crossings on the CALCASIEU RIVER between HINESTOWN (incl.) and SIMPSON (excl.). The First Brigade was directed to advance via the PITKIN—HINESTOWN road and seize the bridge at HINESTOWN (A). The 2d Brigade was directed to advance via Highway 472 and seize the crossings of the CALCASIEU RIVER north of LA CAMP (B, C and D).

SPECIAL SITUATION (MAP 2)

A detachment of the 7th Cavalry (Lt. Col. Allen, comdg.), consisting of the 2d Squadron (Major Mudgett, comdg.), one platoon of caliber .30 machine guns and one section of caliber .50 machine guns, one scout car section and one pack radio section, was directed to operate on the left flank under control of the 2d Brigade. Its *mission* was to advance via points 3-4-7-8, to protect the left flank, to seize the road junction on Highway 21, six miles south of SIMPSON, and thence to act aggressively towards the east.

OPERATIONS OF THE FLANK DETACHMENT (MAP 2)

The detachment started from point No. 1 at 5:30 AM, August 17th for point No. 3, its prescribed point of departure from the counterreconnaissance line.

Near point No. 2, at 6:00 AM, the advance guard encountered a hostile rifle platoon with several machine guns in support. This enemy platoon had penetrated the Red counterreconnaissance screen before daylight and was going into position astride Highway 472 when first observed. The leading troop attacked, mounted, before the hostile machine guns could be set up and drove this enemy platoon to the northwest. Four captured prisoners were identified here from Troop "B," 6th Cavalry.

The detachment then resumed its march to point No. 3, where final orders were issued to initiate the advance towards the objective. It was found that the pack radio section, supposed to join here from the outpost, had been intercepted and was not available.

The scout car section was directed to parallel the advance of the detachment via the route 3-R-M-6 Y, to reconnoiter that route and all cross-routes, to act by stealth and to meet the detachment at point Y for further orders. (It was captured later and never rejoined.)

The detachment crossed the counterreconnaissance line at 7:00 AM. Troop "F" (Capt. Finnegan, comdg.) constituted the covering detachment. The command group closely followed the covering detachment. The main body followed in the order Machine Gun Platoon, then Troop "E."

In following the prescribed cross country route from point No. 3 towards point No. 4, it was necessary to march by compass over rough terrain, interspersed by small streams and swampy areas. The rate of march was 5½ miles an hour.

Near point No. 4, a hostile patrol from the 1st Squadron, 112th Cavalry, was captured by the covering detachment. Visual reconnaissance from here and reports from mounted patrols indicated that the enemy was holding a commanding ridge near point No. 6, one and one-half miles to the north, with about a squadron of horse cavalry.

At about 9:00 AM, the squadron started a wide envelopment from point No. 5 around the enemy's west flank. During the development of the squadron, the rear unit, Troop "E," was attacked from the right rear by Troop "B," 6th Cavalry. As a result, Troop "E" was held up by umpire's control for 30 minutes. This temporary setback resulted from excessive dispersion in the squadron at that particular time. Thereafter the squadron functioned with greater cohesion and with the supporting weapons more closely available. The squadron was reorganized and the advance resumed at 9:35 AM.

A coördinated attack was launched against the hostile position near point No. 6 at 10:10 AM. Troop "F" cov-

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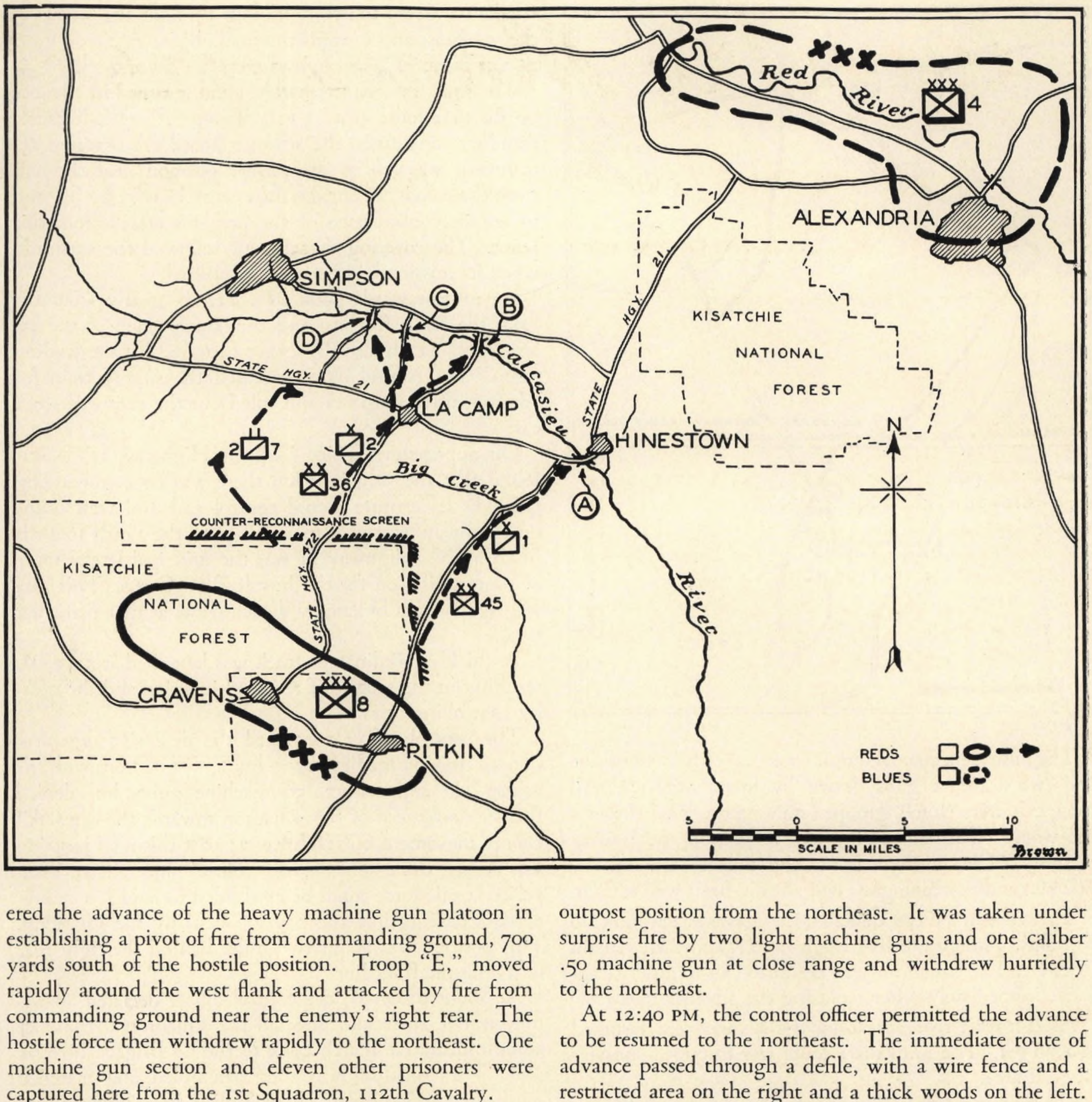
*Then, Lieutenant Colonel, 7th Cavalry.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ered the advance of the heavy machine gun platoon in establishing a pivot of fire from commanding ground, 700 yards south of the hostile position. Troop "E," moved rapidly around the west flank and attacked by fire from commanding ground near the enemy's right rear. The hostile force then withdrew rapidly to the northeast. One machine gun section and eleven other prisoners were captured here from the 1st Squadron, 112th Cavalry.

The squadron was then reorganized and the advance to the northeast was resumed without delay.

Reconnaissance indicated that the enemy squadron, previously encountered, was now in position at point No. 7, 1½ miles to the northeast. A coördinated attack was launched at 10:35 AM against the hostile second position, resulting in the elimination of the 1st Squadron, 112th Cavalry, with a machine gun platoon attached.

After a brief reorganization, the advance was resumed to the northeast. At 11:40 AM, the advance was held up at point No. 8 by umpire control. There was a narrow defile here, which was not defended by the enemy. However, the control officer assessed an arbitrary delay here of one hour. The defile was immediately out-posted by machine guns and riflemen.

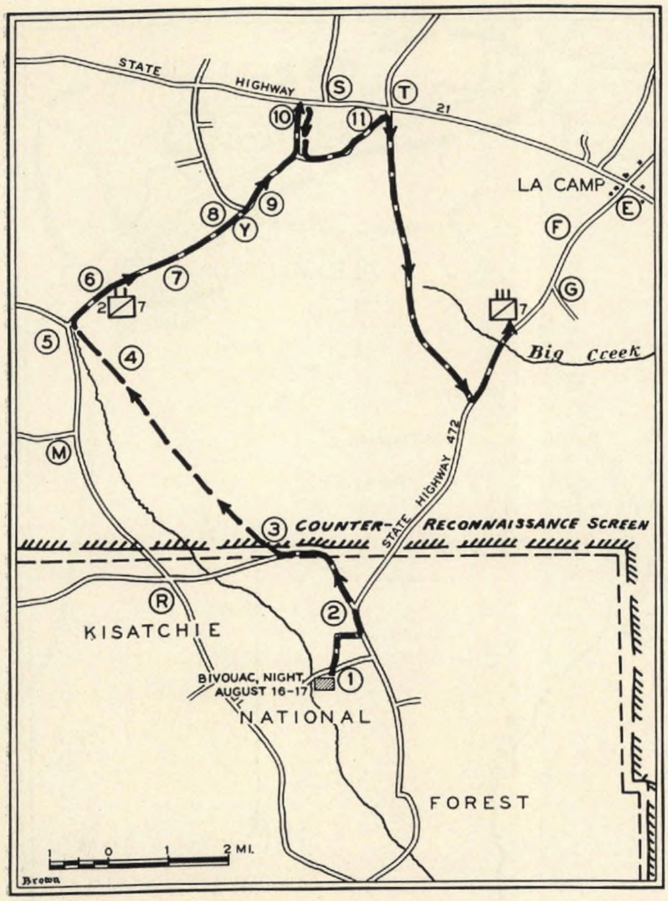
During this interval, a hostile scout car approached the outpost position from the northeast. It was taken under surprise fire by two light machine guns and one caliber .50 machine gun at close range and withdrew hurriedly to the northeast.

At 12:40 PM, the control officer permitted the advance to be resumed to the northeast. The immediate route of advance passed through a defile, with a wire fence and a restricted area on the right and a thick woods on the left.

The advance guard encountered a hostile mechanized unit at a sharp bend in the road near point No. 9. The close terrain and the compact formation of the hostile mechanized unit permitted the leading car only to open fire; this car fired on the advance guard.

The advance guard, supported by one light machine gun squad and one caliber .50 machine gun, went into action against the mechanized unit. The heavy machine gun platoon, with one caliber .50 machine gun, was directed to detour through the woods on the left and to attack the exposed right flank of the mechanized unit. One rifle platoon was directed to execute a close-in envelopment through the woods on the left. The remainder of the squadron was directed to take cover.

At this point the control officer conferred with the opposing commanders.



The hostile mechanized unit consisted of four scout cars and two antitank guns drawn by motor vehicles. All these cars were closely grouped on a narrow road through the woods, with a possible field of fire for the leading car only. The envelopment of this mechanized unit by riflemen and machine guns had already been well started.

The control officer directed the mechanized unit to withdraw 5 miles, north of Highway 21, and there remain inactive. The squadron was permitted to resume its advance immediately, after replacing the advance guard.

After a brief reorganization, the advance was resumed at 1:20 PM. The immediate route was through a heavily wooded area.

On reaching point No. 10, near Highway 21, further advance was blocked by a reinforced troop of enemy cavalry, later identified as Troop "B," 6th Cavalry (Capt. Gordon Rogers, comdg.). This troop was well disposed, holding a well organized position opposite the exit from the woods. Maneuver was limited because of the restricted area on both sides of the road. Here unsuccessful efforts were made to infiltrate past the enemy's position. Reconnaissance was then conducted to locate another route from the rear, which would permit the squadron to pass the opposing force and to continue on its mission towards Highway 21, farther to the northeast.

The control officer held up both forces at this point for 1½ hours and declared a truce during that interval.

Combat conditions were resumed at 4:00 PM. Previous to the temporary truce, a practicable route was located, one-half mile to the rear, leading through the woods to the northeast and towards the final objective, a road junction at point "T" on Highway 21.

The squadron countermarched and resumed its advance on the new route at 4:05 PM. Troop "E" (Lt. Meador, comdg.) constituted the advance guard. A covering detachment was left at the former position near the exit from the woods, to engage the enemy heavily by fire and to feint a continuation of the previous attack from this point. The covering detachment followed the squadron when its mission had been accomplished.

En route towards point No. 11, an enemy scout car from the Sixth Cavalry and the supply train of the 1st Squadron, 112th Cavalry, were captured by the leading troop. The control officer released the supply train for administrative purposes and ruled out the captured scout car.

On approaching point "T" on Highway 21, it was found that the road junction there was on commanding ground. Its capture would control east and west traffic on Highway 21 and a main route to the north towards SIMPSON. Highway 21 was the principal lateral route of communication for the hostile Blue Corps. This area was lightly held by enemy detachments at that particular time.

A quickly coördinated attack was launched at 5:15 PM, resulting in the seizure of the road junction and the nearby controlling terrain.

The control officer permitted the defensive organization of this immediate area by the squadron with its caliber .30 and caliber .50 machine guns, but denied further movement of the squadron towards the east. All enemy movement on Highway 21 past this road junction was denied the enemy by the control officer, until a superior hostile force could be assembled to launch a coördinated attack against the position held by the squadron. This position was about two miles behind the right rear of the hostile front line.

At about 6:00 PM, the control officer declared an administrative truce and directed the squadron to conduct an administrative march back to the 2d Brigade bivouac area. The squadron was then assembled and marched southeast across country, about 8 miles to its bivouac near BIG CREEK on Highway 472.

Considering the devious cross country routes followed and the many tactical movements involved, it is estimated that the squadron covered 35 or 40 miles during the day's operations. The condition of the animals was assisted by frequent watering and by frequently removing the pack loads.

RECONNAISSANCE AND SECURITY

Reconnaissance and security were primary factors in the day's operations.

A widely deployed, *well controlled* covering detachment was used in conducting the squadron across country, particularly when necessary to find crossings through swampy areas and in marching on successive objectives. Alertness of the covering detachment resulted in the frequent capture of hostile patrols. The covering detachment was also useful in covering the advance of machine gun units for the quick establishment of supporting fires.

Advance guard formations were used in traversing long stretches of closely wooded areas. But even then, small patrols were used for preceding and flanking the advance guard.

Mounted patrols were invaluable for determining enemy dispositions. **Much of the terrain covered was impassable for motorized reconnaissance vehicles.**

COMMUNICATION

It was initially planned to use radio communication at hourly intervals, supplemented when necessary by mounted messengers. A simple geographical and tactical code had been arranged for use with 2d Brigade Headquarters, to facilitate radio communication. However, the loss of the pack radio section and the attached scout car section prevented using radio.

Total dependence was placed on mounted messengers. The distances covered, the rough terrain traversed, the lack of a well defined axis of communication and the activity of intervening enemy detachments, necessitated restricting messages to those of vital tactical importance.

Officer messengers, well mounted and with one orderly accompanying them, were used for communication. Four messages were delivered to 2d Brigade Headquarters in as reasonable a time as could be expected in actual combat. Lieuts. Johnson, Spaw and Cummings showed unusual activity and resourcefulness in this capacity.

Reconnaissance Troop Officer's Diary

By Lieutenant Tom E. Matlack, 4th Cavalry

THIS account of my duty with Troop F, 4th Cavalry from the time the regiment was reorganized as a Horse-Mechanized *(Corps Reconnaissance)* Regiment through the Third Army maneuvers and the Fourth Army maneuvers is given for those similar young heroes who, having been imbued with the doctrine of keeping their heels down and their eyes up suddenly find themselves in an atmosphere of gasoline and oil and are faced with the problem of making their decisions at 30 mph instead of six.

The observations are not made as a final analysis but merely as one opinion so that others may compile them with their own and so that a definite procedure may eventually evolve for this type of unit which is admittedly still highly experimental.

In order to give a picture of the evolution of this troop of the mechanized squadron, and an idea to the troop officer of the details and minor problems with which he will be confronted I will give some excerpts from my imaginary diary.

February 1, 1940.

REORGANIZATION

Today the regiment became a *Corps Reconnaissance Regiment,* horse and mechanized. The second squadron will be mechanized. The two troops of the squadron will be identical and each will be composed of a troop headquarters of two scout cars, two scout car platoons of two sections each, and a motorcycle platoon of two sections, each section having two six-man squads. There will be a scout car in the motorcycle platoon also.

April 7th.

The reorganization period of the regiment was handicapped by lack of equipment. However, specialist schools were started immediately and today after a little over two months we have enough trained men to move the regiment and to operate all radios. We had to drop about half the men originally selected to go to radio school for lack of aptitude. The mechanics gained valuable experience in overhauling the M1 scout cars which we received in very poor condition. Scout car drivers need about forty hours instruction except those men who have been truck drivers; they need very little. Handling a scout car requires a skill which can only be gained through experience with heavy vehicles. Motorcyclists were trained first on side cars and then on solos. Men selected for motorcyclists should be strong. Any man that lacks coördination will not make a solo motorcycle rider.

April 23rd.

We find that maintenance worries will be greatly decreased if the men are impressed immediately with the fact that there is no change of routine when a unit becomes mechanized. The usual stable period now becomes a maintenance period. The entire troop should be present at this formation. Supervision should be close. The driver should only be required to conduct his first echelon maintenance of the motor and running gears. Other members of the crew care for the body of the car. If arms are cared for at the same time and in the same area, time will be conserved and unit commanders can supervise the entire unit at once.

April 25th.

A MARCH

Today we left camp Robinson to move to Jasper, Texas by marching. The mechanized squadron marched as a serial and the troops marched as units with fifteen minutes interval. The rate of march was 30 mph. The head of the column marched at 35 and the maximum speed was 40. Distance between cars was the number of yards equal to twice the speed in miles. The motorcycle platoon marched by squad, each squad keeping the same distance and using the same rule as the cars. Within the squad the scouts were in double staggered column with ten yards distance which was maintained at all times. By this method of marching there was very little whip at the tail of the column and the time interval for the troops was practically the same regardless of the speed due to the distances being shortened as the speed decreased. This was also a help in closing up the column before going through towns. The troop had thirteen vehicles, four motorcycle squads, and six messenger motorcyclists disposed through the column. Its time interval was slightly less than two minutes. It was found that if the leading vehicle cut its speed to 20 mph one mile and an eighth prior to the point where it was desired to have the troop closed up it could continue through the town at that speed and the rear of the column would be closed up before arriving in the town. The leading car should move out at marching speed immediately upon clearing the town as the opening out point will progress and will not affect the speed of the vehicles still in the town. The best method for maintaining control and march discipline was to have the Executive Officer ride in the troop command car and set the pace. A radio car should be placed at the rear of the troop and just in front of the maintenance section, and be in contact with the troop command car. The troop maintenance officer should be at the rear of the troop. He should leave back the lightest vehicle of his maintenance section which can make the repair and attempt to keep the maintenance truck up with the troop as much as possible. The troop commander should ride either a solo motorcycle or in a side car and should cover the column frequently. When approaching towns or critical points on the route he should move ahead of the troop so as to be able to make any decisions necessary before the troop arrives.

May 11th.

MANEUVERS NO. 1

At first the scout car sections worked independently and motorcycle patrols were sent on independent missions. The loss of scout cars was very high as they are very susceptible to ambush and antitank weapons. We have now discovered that by working a scout car section and a motorcycle squad as a team the efficiency of both units is greatly increased and the vulnerability of the scout car is reduced to a minimum. These teams have been very successful in obtaining information.

May 12th.

Today the regiment outposted the north flank of the Corps. It was found that by posting a scout car section and motorcycle squad at critical points the scout car personnel could take up a defensive position and the motorcyclists could patrol to the front for as far as forty miles. A system of overlapping patrols of motorcylists, each patrol consisting of two scouts was found to be most satisfactory. For example, a team was posted at Robeline. From this town the scout car section could defend a three point road intersection and if pushed out, delay west on Hwy 6 over favorable terrain. It was desired to have positive or negative information of the Hwy intersection and bridge at Natchitoches. A two man motorcycle patrol was sent to this point. Thirty minutes later another two man patrol relieved the first. These two patrols continued to relieve each other at thirty minute intervals. As the distance was twenty miles which took the patrols thirty minutes each way, this resulted in positive or negative information hourly which was radioed back to squadron another twenty miles to the rear. The hourly information received at regimental headquarters of a point about forty miles in advance of the MLR was never older than forty-five minutes. The town of Natchitoches was far behind the enemy line and occupied by enemy troops but this did not deter the motorcyclists from accomplishing their mission.

May 15th.

The most surprising thing I've noticed is the ability of motorcyclists to cover rugged terrain and to obtain detailed information from the enemy rear by making wide cross country movements around his flanks. One motorcycle squad in making an eighteen mile encirclement travelled about half the distance off the roads. A way around most obstacles was usually available but at one point the squad was held up by swamp. By cutting poles and putting two poles through the frame of each machine and four men carrying it on their shoulders the squad was able to cross fifty yards of swamp in about thirty minutes. The time lost here was quickly made up on more favorable terrain as the entire eighteen miles was covered in one hour and forty minutes, including some reconnaissance.

May 24th.

Today we concluded the maneuver and are assembled at Many. Our lack of mechanized training encouraged experimentation. Every unit has experimented and by trial and error has evolved their own procedure which seemed to them to be the best way of accomplishing their mission. From these various experiments we should be able to obtain a good idea of the best methods which will obtain the best results.

June 5, 1940.

METHODS DEVELOPED

Yesterday the regiment arrived in Fort Meade, South Dakota, its home station after having been in the field since November 20, 1939. A conference was held today of all the officers and non-commissioned officers of the troop. Each person related his method for reconnaissance and other missions and made his comments in light of experiences in the Third Army maneuvers. From these accounts we have worked out a definite procedure for reconnaissance and delaying action. It is planned to train the troop thoroughly in this procedure during the next month so that it may be tested in the Fourth Army maneuvers. The method arrived at for reconnaissance is the following:

The normal reconnaissance patrol will be a scout car section with a motorcycle squad attached. A point of two motorcycle scouts precedes the section by overlapping bounds. Designating the scouts as number one and number two, number one moves forward to the next terrain feature, dismounts, and observes to the front. Number two covers number one's advance and then mounts and moves at maximum speed past number one and on to the next terrain feature. Number one is prepared to cover number two by fire from the time he passes him until he reaches his objective. Number one then mounts and moves rapidly past number two covered by the section leader's car. The section leader's car followed by the remaining motorcyclists of the squad follows the point and occupies the position just vacated by the rear scout of the point. The second car of the section covers the advance of the section leader, then closes up and prepares to cover him to his next bound. The section leader sends motorcycle scouts down side roads by hand signals. Motorcyclists sent out should always be in pairs and operate similar to the point. We arrived at the following method for delay, defense, or counterreconnaissance:

The motorcycle platoon is spread out on a wide front forming a screen. Their mission is primarily observation. Scout car elements are held at central points behind this screen. The entire motorcycle screen is coördinated directly by troop headquarters. When an enemy column is reported penetrating the screen then one scout car element is thrown in front of it and other car elements harass the column from the flanks or rear. If a second enemy column penetrates the screen then a platoon is assigned to each column and the portion of the motorcycle screen in that sector is controlled by the platoon. The troop coördinates the position of the platoons. The platoons dispose their elements against the enemy columns in the same manner as the troop and when other enemy units appear in their sectors detach sections to deal with them, that section then controlling his portion of the motorcycle screen.

On all missions the same motorcycle squad and scout car section should work together. Both on reconnaissance

Solo motorcycle scout

and delaying action when a section is detached by a platoon the section then comes under direct control of troop headquarters, thus shortening lines of communication and speeding up control.

Everyone agreed that scout cars acting alone were extremely vulnerable in forward movements and that a patrol of a scout car section and a motorcycle squad could accomplish the best results with the least cost.

June 15th.

A method of training which we have found to be effective is the following: We station all personnel on a large hill just west of the post from which a continuous view can be gained of a gravel road for eight miles. The terrain is rolling prairie with little or no cover except high grass. A scout car section and a motorcycle squad are sent out to work down the road toward the group on the hill in the prescribed manner for reconnaissance. The group on the hill can then observe and criticize and when the first group has finished they join the personnel on the hill and another group is sent out. By this means we have discovered numerous points by which we can avoid observation. For example, a motorcycle scout who travels close to the shoulder of the road has the grass on the side of the road as a background and can advance much nearer than a scout who travels in the middle of the road and has the road as a background. In open country where terrain features are not available for bounds the scouts should overlap each other by approximately four hundred yards and the leading car should follow the rear scout of the point by about 400 yards. If the leading scout is fired upon at 400 yards then the leading scout car is twelve hundred yards from the enemy and out of effective antitank fire. Even if the enemy does not fire on the first scout and allows him to come to their line, the second scout covering his advance will see this and the leading scout car will still be 800 yards away from the enemy. If the car keeps moving and obtains cover within the next few minutes it still will not be entirely vulnerable to antitank weapons.

June 30th.

The leading motorcyclist of a reconnaissance patrol will be the most vulnerable man to enemy action. To reduce this the motorcyclists have discovered a means of reversing their direction almost instantaneously. By coming almost to a stop with the gears engaged in low, laying the machine over on its side at an angle of about forty-five degrees supported by having one leg on the road and then gunning the motor, the rear wheel can be skidded on the road surface, facing the machine in the opposite direction almost immediately. This can be done on any gravel or dirt road or trail that is only as wide as the machine is long.

One man whom we timed passed a point at 30 mph, stopped, skidded around and passed the same point going in the opposite direction at 30 mph in seven seconds. A scout who could execute this movement and then zig-zag down the road at high speed would offer a very poor target for any weapon.

July 15th.

The regiment arrived in its base camp at Lake Alexander near Lincoln, Minnesota, where it will train preparatory to the Fourth Army maneuvers. In order to get acquainted with the terrain, to train the personnel in map reading and sketching, and to correct and improve the maps issued, the reconnaissance troops have been thoroughly covering the maneuver area by numerous patrols, each patrol changing and entering data on its map in conformity with the terrain. Map reading and sketching are of major importance to every man in this troop. The importance of each individual is greatly increased in a reconnaissance troop. The normal mission given a sergeant section leader and often to a motorcycle corporal will be one which if given in a horse troop would call for an officer's patrol. The observations of a motorcycle patrol of two scouts will often directly affect the disposition of the entire Corps. In addition, because the information desired by this unit will be of large movements or dispositions each man must have considerable training in tactics and organization of other arms.

August 12th.

MANEUVER NO. 2

This was the first day of the Fourth Army maneuver. The 4th Cavalry was ordered to gain contact and delay the blue force reaching a line 30 miles east of the Mississippi River by 4:00 AM. The mechanized squadron crossed the river at 2:00 AM and fanned out on a twenty-five mile front. F Troop was on the north and was assigned a sector twelve miles wide. No reconnaissance could be accomplished due to the darkness but as the patrols began nearing the final phase line about daybreak they encountered *road blocks* covered by small infantry detachments. These blocks stopped the scout cars but motorcycle patrols were sent around them and soon reported the 2nd Cavalry marching northeast. The 1st Platoon on the south which had contacted the 2nd Cavalry fell back on successive delaying positions and finally took up a strong position at a bridge over an inlet between two lakes which effectively stopped the advance of the 2nd Cavalry in that direction. The 2nd Platoon to the north of the lakes sent a section to the south and rear of the 2nd Cavalry and discovered an Infantry Regiment halted in its rear. Although we have only one radio which is in the squadron net and all communication within the troop is by motorcycle messenger, all the sections were easily controlled and information was prompt. From the experience of the 1st Platoon we find that to effectively delay horse cavalry, positions must be selected with great care and variation. Cars should seldom go into position on the road. One effective position was to put the antitank guns and one or more .50 caliber machine guns on or near the road and have each half of the unit several hundred yards on either side of the road so that they had a good field of fire on the road to the front, sufficient cover, and a covered route of withdrawal to the rear. Personnel from the scout cars should be used for close flank guards and motorcyclists should be sent well out to the flanks. Generally one scout car of a section can find a position in which it can be concealed and still have a field of fire for its guns mounted on the car. The guns of the other car should then be dismounted with the car left under the nearest cover to the rear. The car with the mounted guns can then cover the withdrawal of the dismounted guns and can make a quick withdrawal itself. In withdrawing from a delaying position the motorcyclists should withdraw first and move to the nearest observation point to the rear. The scout car element should then break contact rapidly and move approximately a mile to the rear in order to have sufficient time to select and organize its position. The motorcyclists should fall back on successive points of observation keeping contact with the enemy. This group of motorcyclists should be only one of a wide screen which is coördinated with their position to prevent flanking movements.

August 13th.

The troop bivouacked on the south flank during the night and supplied a regimental outpost. At daybreak we fanned out and reconnoitered south and east. Nothing was discovered to the south but a section moving east toward Center Valley was stopped by infantry in position. Motorcyclists from this section went around the infantry position and discovered and identified a Combat Team marching west into Pierz and turning north. Later in the day we were pulled back and took up an outpost line on the south flank behind the Platte River. All the bridges on this stream were blown. Motorcycle squads either forded the stream or went 30 miles to the south to an undestroyed bridge and reconnoitered the entire area to the south and east, coming around in rear of the enemy south flank. We were reluctant to send these squads out on such a distant mission because if the troop had been withdrawn from the outpost position there would have been no means of recalling these patrols. If at least one motorcyclist in each squad had a receiving set such as police carry on their machines our worries would have been over.

A road block

August 14th.

In the afternoon the regiment screened the movement of the 6th Division on a wide envelopment of the enemy south flank. The squadron moved rapidly south, then east, and then wheeled north on an eight mile front toward the enemy south flank and rear. The enemy outpost line was reached just after dark.

August 15th.

The line reached last night was held during the night and today. On the following day the 6th Division was to attack northeast with the second squadron protecting its east flank. To do this it was necessary to acquire an isolated road junction in the center of a swampy area which was known to be held by the enemy. F Troop left their vehicles and made a dismounted attack through the swamp just after dark and in a severe thunderstorm and drove out a troop of cavalry and two tanks at the road junction. Light machine guns and one fifty were carried for over a mile through the swamp. Water cooled guns would have seriously handicapped this movement. So far we have had no experience where heavy guns would have been of value and in most instances they would have been a hindrance.

August 20th.

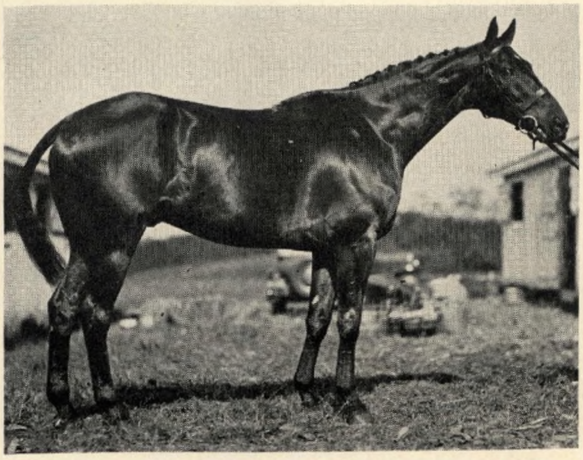
CONCLUSION

The regiment is back in Fort Meade. After two maneuvers and about four thousand miles of marching we are all thoroughly convinced of our ability as a fast reconnaissance agency. We believe the solo motorcycle is indispensable and its number in proportion to scout cars should be increased. We would like to keep the Garand for the motorcyclists in preference to the "Tommy" gun. We would like to have a 60-mm. mortar carried in the scout cars. Our principles for reconnaissance evolved after the Louisiana maneuvers proved exceptionally successful in the last maneuver. However, we will continue to experiment and attempt to evaluate the many new ideas which constantly are being presented.

Back-Scratching Game?

By Clarence E. Bosworth*

CAN YOU imagine any government bureau in these days of constantly increasing requirements and huge appropriations, pounding along with amazing effectiveness without appearing before Congress at frequent intervals to say, "Gimme another billion"? Unbelievable as it may seem, it isn't necessary to limit so pleasant a conception to imagination because it is a fact. The bulk of the evidence is concentrated down in Washington in a little office on the second floor of the Munitions Building. More of it is scattered throughout the country at the several Remount Depots of the United States Army, at ranches and in private stables from coast to coast.



A Remount Product

There's no secret about it, but there are subtleties aplenty; and not until the Navy thinks up some scheme to induce civilians to build battleships to be used as yachts until the Navy commandeers them for war, should the navy boys be allowed to sit in the front row with our army boys. This is the reason:

In the event of war, the Army would need hundreds of thousands of horses. If you have guessed that the mechanizing of cavalry and artillery has obsoleted horses in war, guess again. The publicity pictures showing Germany's invasion of Poland in 1939 featured the impressive mechanized units; but Germany used 200,000 horses in Poland, and approximately 791,100 horses in the Low Countries and France, to help her do the job! In preparation for the war with Germany, England, at the behest of the French, re-mounted troops and re-horsed artillery that she had mechanized before the war. Despite all popular notions to the contrary, mounted cavalry is still, relatively, just as important an element in the combat forces as the infantry. The machine guns and pieces of light artillery that are moved about on the backs of horses and mules still have a strategic value that the mechanized units, including airplanes, haven't even threatened.

So, it is the responsibility of the officers of the Remount Division to see that an adequate supply of horses in needed types and of superior quality is maintained against possible emergency. Just imagine how terrific the cost would be if the Army maintained an adequate supply of such horses year after year against possible emergency! It takes five years to produce a four-year-old horse schooled, matured and conditioned to *begin* service in the Army. What a fine mess these officers would be in if they had to start from scratch to produce horses as soon as war became certain! Being as smart as they are, they duck the cost, avoid the labor, and obviate the possibility of finding themselves in a mess in case of emergency in typical Tom Sawyer fashion. They don't say so right out loud, but, as a special favor, they encourage us civilians to breed, train and maintain an adequate supply of horses in military types so that, in case of war, they will be able to commandeer all they need as they need them. It just shows how economical-minded and far-sighted these army men are. Smartly uniformed, military mannered, disconcertingly competent, these officers may be named Hardy,* Whitside or what not, but to me they are all named Sawyer—Tom Sawyer. Being Tom Sawyers, they get other people to carry the burden and do most of their work for them—and like it. Yes, really like it. Therein lies their artistry.

They begin by placing some seven hundred stallions throughout the country in custody of civilians. They get these stallions either as gifts from horse-owning, patriotic citizens or for a fraction of their value from other patriotic owners. Then, the civilians who accept these superior animals, *pay all the upkeep!* Yearly maintenance often costs the civilian custodian more than the stallion cost the Government in the first place. Any owner can, for a few dollars, breed mares of good type and quality to these stallions. This system makes a hit with mare owners because, in the aggregate, it saves them thousands of dollars a year in stud fees and makes available much finer stallions than would otherwise be found in most communities.

Naturally, breeding good mares to superior stallions has resulted in the production of more fine horses than would have been the fact otherwise. Breeders point with pride to their colts; the Remount officers chuckle with glee; and devotees of riding and horse sports generally, get more enjoyment out of these finer horses. And when those of us who have been "victimized" take a second look at what we have produced, we usually find that the new horse represents one of the army types.

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*Courtesy *National Horseman.*

*Colonel E. N. Hardy, Chief of Remount Section.

Not content with having kidded us into breeding the types and qualities *they* may want some day, any day, they kid us into breaking, schooling and proving these finer animals. Having done that, they inveigle us into participation in horse sports with more personal activity than we've ever engaged in them before. They know that this will cause us to keep, again at our expense, many more horses than we would if they let our interest in horse sports just dawdle along.

The result is, these officers have provided a supply of the finest horses available in numbers to any army in the world. They haven't cost the taxpayers a cent for rearing or training. They are not costing the taxpayers anything while being held in reserve.

Do horsemen resent being played for this good thing by the Army? They do not. They get a thrill out of it. More than that, they get full value, higher quality at less cost; and many people of both sexes and all ages are enjoying the benefit of health-renewing, shape-restoring exercise that we wouldn't get except as we try to keep up with the Army. It is a perfect example of you scratch my back and I'll scratch yours. When the Army Show Team enters the ring at a horse show, it is with a purpose. To show us civilians what can be done and how to do it! Those top horses that jump to Olympic heights in Olympic form aren't just show horses. They are samples. The army men show them off so we'll go home and breed, raise and school more like them. When Major Tuttle, Captain Kitts and the other *dressage* riders show their horses in almost unbelievable exhibitions of dexterity in handling their feet, legs and balance, and in amazing displays of obedience and manageability, don't get the idea that the exhibition is merely for your entertainment. The Army is not, most decidedly not, in the entertainment business.

Dressage is the highest form of equitation, and these officers are subtly suggesting that we go home and school our horses beyond the point where they will turn right and left if we pull on the reins hard enough, start when we say "Gid-dap," and stop when we say "Whoa." Being human and much averse to admitting that army horsemen can do anything that we civilians can't do just as well or better, we hurry home to work out their challenge. It is great sport, grand exercise, and just as much more thrilling as playing a concerto instead of thumping out "Home Sweet Home" with one finger.

This "passing of the horse" that we have heard about for thirty years might have become a fact except for these subtleties of the Remount officers which gave horses and participation in horse sports such an amazing popularity, and solved *their* problem of a reserve against possible need. Today, we have more horses under saddle than at any time in the country's history. Of course, they are there for sport and pleasure instead of, as so recently, a necessary item in our scheme of personal transportation. But what of it?

Any animal that adds so much to health, mental alertness, physical fitness and enjoyment of life is worth all it costs if it never does an hour's "work" in its whole life. If there's ever a temptation to appraise the good sense of spending so much money to keep so many horses just for fun, don't forget that the sports industry has an amazing economic value to our country, as well as a tremendous social value. The sports "industry" runs to well over a billion dollars a year!—and our light-horse "industry," that is, horses for sport and pleasure instead of draft work, must be worth pretty close to a half-billion dollars because the Thoroughbred racing part of it is worth $185,000,000 in itself!

So, "the Remount," as this department of the Army is familiarly called, can take credit for much of the perpetuation of this great industry with all its ramifications into economic, social and national defense values. Little wonder then that, as they contemplate the half-billion-or-so-dollar industry they inspired, and the great supply of superior horses they encourage *us* to keep for *them,* the Remount officers have warrant to feel that they have done a good job for themselves and for the country. Armies are seldom thought of as contributors to health, well being and prosperity; but ours is.

☆ ☆ ☆ ☆

The Art of War is divided between force and stratagem. What cannot be done by force, must be done by stratagem.

—*Frederick the Great.*

What Would You Do?

CAPTAIN NEWCOMER drew a deep breath just prior to entering the presence of Colonel "Old Man" Rivers' ambulance, which the colonel insisted on using as a field headquarters, and was immediately sorry he had done so.

"Sit down, Newcomer," he roared hospitably, "I have selected you for a special mission."

"Oh, not because of any special ability, my boy," he said to erase the pleased look from Newcomer's face, "but your troop has been loafing during the last twenty-four hours while the rest of the regiment has been exhausting itself."

"Look at the map here," he went on, "down the road about six miles is a small ridge which you can see is highly important to the capture of the objective assigned the regiment. I'm going to rest the regiment here in bivouac for another hour while your troop goes ahead and siezes that ridge. Arrive on your objective as soon after daylight as possible, which gives you a bit more than an hour. I am attaching Mr. Klutch and a section of his scout cars to your troop, and I shall follow you in an hour. Any questions?"

"Yes, colonel, what about the enemy—and can't I have some machine guns?"

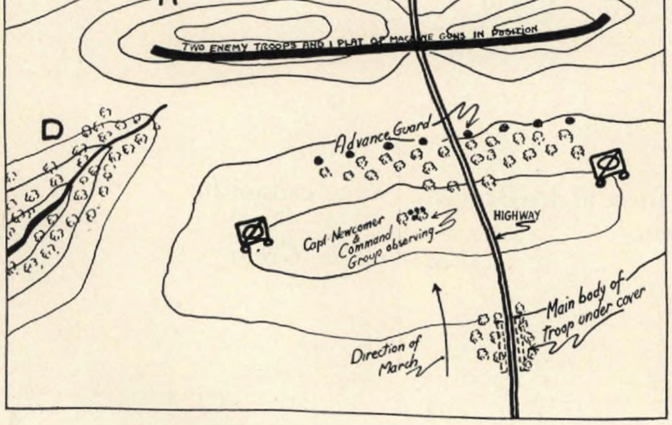
"Sorry, Newcomer," replied Colonel Rivers, "the machine gun pack animals have a hard day ahead, and I need them all. As for the enemy, I doubt that you'll see any. The last report we got showed a small concentration over in Beeville. Well, run along, now, that's all."

* * *

(See sketch)

"Klutch, are you positive you could see all that in the dim light?" asked Captain Newcomer.

The scout car officer appeared somewhat offended. "I've been working with Colonel Rivers a long time, sir," he said, "I believe I know what two troops and a heavy machine gun platoon look like on the road. And I know that when they deploy and dismount along Hill A—B, over there, and send their led horses to the rear, that they're probably going to defend. It looks as though they had beat you to it, Captain," he added rather unnecessarily.


A
B
TWO ENEMY TROOPS AND 1 PLAT OF MACHINE GUNS IN POSITION
D
Advance Guard
HIGHWAY
Capt Newcomer & Command Group observing
Main body of troop under cover
Direction of March

A mounted messenger galloped up with a message which Newcomer hastily read.

"I'm afraid you're right, Klutch," he said, "Corporal Heeves' patrol and Sergeant Kollick's patrol have located their flanks at A and B (see sketch) and the advance guard has been stopped cold up ahead there. But that ridge A—B is the one Colonel Rivers told me to capture, and you know how he likes aggressive action better than I do, probably. Look here, Klutch," he burst out, "I can't radio Colonel Rivers for orders—he'd try me. I can:

(1) remain halted under cover back in those trees, radio Colonel Rivers as to the situation here, and await the arrival of the regiment, *or,*

(2) I can attack at once enveloping the enemy right by moving two platoons dismounted up the draw (D), meanwhile making a secondary attack with the other platoon and the light machine guns from this ridge we're on, *or,*

(3) I can gain contact with the enemy position, make a further reconnaissance, notify Colonel Rivers and await orders, *or,*

(4) I can attack the enemy at once, mounted, supported by the light machine guns from this hill.

"Frankly, Klutch, I'm in a quandary,

"WHAT WOULD YOU DO?"

* * *

A SOLUTION

Captain Newcomer should gain contact with the enemy position, make a further reconnaissance, notify Colonel Rivers and await orders. Of course, this represents an abandonment of his mission. However, faced with a force about twice his size numerically, and with a great disparity in fire power, any attack against the enemy position would be foolhardy in the extreme.

As a matter of fact, the decision recommended above can be expanded into a plan which would have much the same effect as an attack. Gaining contact with the enemy line will serve to prevent further maneuver on the part of an enemy and will secure information which will enable the regiment to act promptly upon its arrival.

Either a mounted or dismounted attack promises little success and may destroy the troop before the regiment can arrive to support it.

A plan to remain halted and ask for instructions would doubtless result in the prompt relief of the troop commander by Colonel Rivers.

"Turn 'Em Over!"

By Captain Bruce Palmer, Jr., 6th Cavalry

EDITOR'S NOTE: *This narrative relates a day's action of a scout car platoon in the III Army maneuvers in Louisiana during the month of August. The platoon described is a part of Troop "F," Sixth Cavalry.*

* * *

ABOUT noon on August 18, 1940, the Blue IV Corps held the line as shown on the map. The Sixth Cavalry extended the line to the west and protected the right flank of the corps. CP of the Sixth Cavalry was at SLAGLE. Troop "F" with two 37-mm. antitank guns protected the right flank of the regiment at LEESVILLE and was at this moment pushing reconnaissance to the west and south.

The platoon leader checked his position. His mission was to cover Highway 118 which ran to the southeast from LEESVILLE. He was to gain contact with and impose maximum delay on any enemy advancing north along this axis. His platoon had been patrolling the highway and side roads which led into it. So far he had been lucky, for he had ambushed and captured two enemy scout cars. But as yet, no general hostile movement had been discovered. At the moment, he had taken cover in a position commanding RJ 100. (See map) From here he could take under fire enemy approaching from any direction.

At 12:15 PM his radio operator called to him. The officer listened to the receiver and suddenly grinned. Somewhere in the vicinity an enemy scout car was using voice and in the clear, too. His own radio was working on 2242—only six kilocycles off the enemy's frequency—so naturally the broader voice band of the enemy was picked up by his receiver. He listened for awhile and then apparently satisfied concerning the enemy's intentions, turned away.

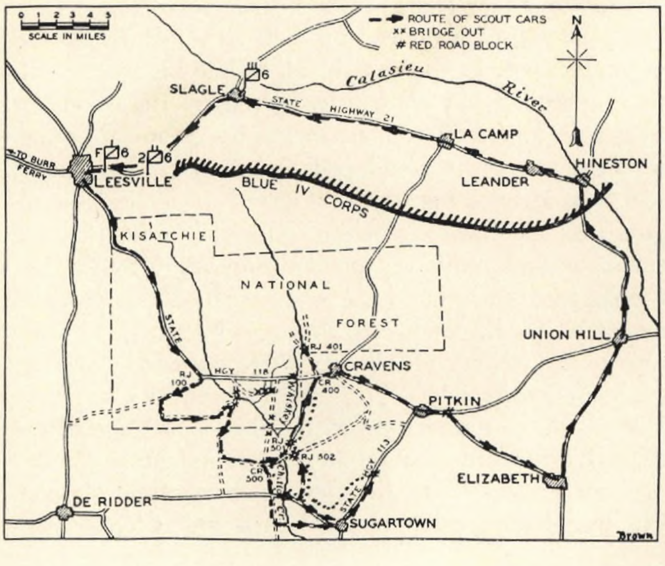
The platoon leader pondered the situation. Except for enemy scout cars, the area was quiet. One section should be able to cover the highway. He recalled his troop commander's words: "The old man wants to know all about the Red 2nd Division. Corps headquarters is particularly worried about this outfit because they are the only triangular streamlined division the enemy has. It is capable of a wide end run. That's why we're out here on this sensitive flank. I'd sure like to locate this 2nd Division. Remember, if you do contact them, hang on, and follow up every move they make."

Patrols from the troop had gone as far as BURR FERRY and DE RIDDER, but no sign of the 2nd Division had been reported. His own platoon had approached to within four miles of CRAVENS but had been stopped cold by a very powerfully protected road block. They had tried to work into the area near CRAVENS using the lateral road net, but had been stopped by washed out bridges. It was *bayou* country and there was no way around the bridges.

The lieutenant turned to his platoon Sgt. "Sgt., I'm going to split the platoon. I'll take my section and try the one route leading into CRAVENS that we haven't tried yet. I'm looking for the 2nd Division. You stay here with your section and one motorcycle and cover this road junction. If we don't return in two hours, assume that we've found something and are remaining in contact. You'll then be on your own covering this Highway 118. Keep moving for safety's sake and report anything important directly to the Troop Commander."

"Turn 'em over!" came the order and soon the command section was rolling. (See map for route taken) The CRAVENS-PITKIN area was known to be occupied by the enemy; two National Guard divisions (square type), the 36th and 45th. The 1st Cavalry Division had been reported in the northern part of the Kisatchie Forest.

The two scout cars moved stealthily, the radio car covering the advance of the point car. The cyclist followed well to the rear, for his noisy engine was a menace to the safety of the section. The country was wild and uninhabited, fairly open with charred stumps littering the area on either side of the road. Good progress was made. Several weak bridges were negotiated with some trepidation. One bridge was too doubtful, but the cars found a way around cross country. They advanced to CR 500 without incident. Here were signs of recent very heavy traffic, including the tracks of tractors, probably the prime movers of 155's. The road to the north had been partially reconnoitered only a few hours ago. It led through a dense swamp and



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A scout car platoon

had several washed out bridges. For that reason, therefore, the road was probably clear, but the lieutenant checked the fact with a motorcycle patrol. He then decided to continue east toward WHISKEY CHITTO CREEK.

The road narrowed abruptly and began to wind and drop toward the creek (in reality an impassable swamp) through thick woods. An enemy supply truck, surprised rounding a turn, was captured without a shot. The captured driver informed them upon questioning that the entire 2nd Division was in bivouac ahead, extending from the swamp north toward CRAVENS. The men were pleased at the news. Here was evidence of the elusive 2nd Division. The cars resumed their advance but now very cautiously. The lieutenant was now riding in the point car. As the vehicle slowly crept around the next road bend, he suddenly caught sight of enemy infantry—a quick survey showed several heavy machine guns and at least one 37-mm. antitank gun covering the approach to the bridge in the background. The enemy had been surprised. They now leaped toward their guns. At the same time, the point car opened up with all guns and backed up under cover of the road bend. While his section was turning around, the platoon leader took to the woods for a hasty dismounted reconnaissance of the enemy. Through his field glasses he could pick up three trucks, one of which he identified as a 9th Infantry vehicle, an antitank gun, and two heavy machine guns. He estimated the enemy to be a reinforced platoon outposting the bridge. Off the road, the ground was very marshy all around, and unsuitable for his scout cars. He, therefore, decided to return to the vicinity of CR 500 where good cover was accessible off the road.

With his cars under cover, the lieutenant radioed the troop CP the information he had found and soon his operator got an "R" for the message. It was now 2:30 PM. His men hadn't eaten for 18 hours. He ordered lunch from the reserve rations. Meanwhile a double sentry watched the road leading to the creek. The new field reserve ration was good. Most of the men preferred the hash, but the lieutenant leaned toward the stew.

About 3:00 PM, one of the scouts brought back a captured solo messenger from the 9th Infantry. The platoon leader questioned the prisoner. He said that his regiment had been told that the 2nd Division would attack at midnight that night to the east. This was a puzzling answer. The Division apparently contemplated a movement under cover of darkness and an early dawn attack. But to the east—What did that mean? Any wide envelopment was expected from the west, not the east, because of terrain considerations. Nevertheless, the lieutenant radioed back the information and the source. He now decided to wait till dark, and then to lead a dismounted patrol in behind the outpost and try to discover what the division was doing.

At 6:45 PM, as the light began to fail, the lieutenant set out, accompanied by his two NCO car commanders, each armed with a Tommy gun. The cars, secured with an all around outpost, were left under cover. At dark, the patrol reached the bridge, to find the large outpost gone, with one lone sentinel on guard. Rather than risk discovery, the patrol slipped around the sentry and soon reached the bridge, a long wooden one. There were a few anxious moments, but the men made the 150 yds. across the bridge in safety. All around lay the swamp, covered with a dense jungle growth. A quarter of a mile farther loomed a second wooden bridge. Again, the patrol moved swiftly across, ever seeking the shadows. As the men approached RJ 501 (see map) disaster almost overtook them. They were half crawling through the bushes on the right of the road where the ground had risen from the swamp, when the officer spotted an anti-tank gun only a few feet away. He turned to warn the others, but one of

Scout car platoon leader

the hostile gun crew discovered him and shouted to his companions. The enemy totaled four men. The patrol decided to run rather than risk a fight and capture. It was a wild flight through an adjacent farmyard, over a high wooden gate, through a plowed cornfield, through a barbed wire fence to safety in a dense briar patch. There had been a tense moment before, when one of the enemy had sent up a flare which for a few seconds showed both the pursued and the pursuers in a brilliant glare. But the enemy had lost them now. It was just 8:00 PM. From the northeast, the direction of CRAVENS, the men could plainly hear the roar of many trucks. Apparently, the 2nd Division was getting ready to leave its bivouac and head north.

The Patrol crossed the road and went towards the sound. But ahead was more swamp. Soon they were staggering through water to their knees, trying to force the way through thick vegetation. The mosquitoes were voracious. The men swept dense clusters of the insects from their faces at every step. The lieutenant, seeing that valuable time was going fast, decided to return to his scout cars. He reasoned that were the 2nd division planning a wide envelopment, it would not be moving north, but probably would be moving down the road he had just traveled.

The men rejoined the section at 9:30 PM. The officer radioed the results of the patrol to the Troop CP, and also his own plan—to try to work toward CRAVENS, or PITKIN, from some other route to the south. The section then took the road toward SUGARTOWN. They traveled without lights, the solo in the rear, throttled down to a whisper. The scout cars tried to work toward RJ 502, but found the way blocked just south of the road junction by an anti-tank gun, and so the section turned back and again headed towards SUGARTOWN. This small village was not held by the enemy, and the scout cars turned north on Highway 113. At the stream crossing 5 miles southwest of PITKIN they ran into trouble. Fortunately, an enemy reconnaissance car, apparently posted as a decoy, gave away the enemy's ambush by starting up and driving like mad for the bridge.

The lieutenant suspecting trouble, turned his cars around and backed toward the crossing. He decided to reconnoiter by fire, and so, therefore, opened up with one brief, but heavy, blast of fire. The answer was enough. He decided that the place was not a healthy one for two scout cars at night and departed at high speed. Having reported the results of the last reconnaissance, he decided to return to the crossing of WHISKEY CHITTO CREEK. The static was now very bad, but the message got through.

His plan now was to take his cars along the route towards RJ 501, which he had already reconnoitered on foot, and surprise any resistance encountered. At 11:15 PM, the section reached the first bridge. A dismounted patrol captured the lone sentinel and his companion who slept nearby. The men were from the 9th Engineers. All they knew was that the 2nd Division had started its movement toward CRAVENS about 8:30 PM. The lieutenant now led the way swiftly across the two bridges. It was a bad place to get caught in—a narrow, winding road in the heart of an impassable morass. The cars halted behind the last road bend before RJ 501, while the officer organized a dismounted attack on the antitank gun crew that had been there earlier. Silently they closed in on the gun position, only to find the emplacement empty. The enemy had pulled out.

There was no time to lose. The cars were brought up rapidly and soon the section was moving up the left fork of the road junction toward CRAVENS. A half-mile from the junction, large dark shapes suddenly loomed ahead. The section quietly pulled over to the right of the road. Ahead flashed a small light and farther along could be seen a series of smaller lights in column. It was a column of enemy trucks. The lieutenant thought: "This must be the rear guard of the 2nd Division." So far his section had not been discovered. He decided to make a reconnaissance on foot with his section sergeant. He told the corporal left in command to bring up the section when he signaled back with the flashlight. This later proved to be an almost fatal mistake.

The two men moved stealthily through the pine woods on the right of the road. About 25 yards from the rear of the column, the lieutenant left the sergeant behind to cover him, and then continued on his belly. A few feet away from the rear truck, he recognized the Indian head insignia of the 2nd Division. The rear truck towed an antitank gun. The gun was limbered up. Ahead was parked a string of trucks filled with doughboys. He estimated the force to be a company.

Then without warning he suddenly heard the low rumble of his own scout cars and looked down the road to see them moving up slowly. The enemy spotted them at about the same time. It dawned on the officer what had happened. The corporal back with the cars had seen the flash of an enemy light and had taken it for the signal to come forward. The enemy antitank gun was going into action when the lieutenant jumped out of the bushes with a wild yell and ran toward the scout cars. "Turn around fast and get out of here! Open up on that antitank gun!"

he shouted. The road was wide at this point with only a small ditch on either side, so that the drivers were able to whip their vehicles around with no delay while the guns blazed away at the enemy gun crew. The section moved swiftly back a few hundred yards and then dashed off the road under cover of some large pine trees. It had been a close call.

Two men watched the hostile doughboys who reluctantly limbered up their gun again. A few minutes later the enemy attempted an attack after a sneak through the woods, but they were discovered and after a hot exchange of fire, gave up and returned to their trucks.

Meanwhile the platoon leader had radioed back the location and movements of the enemy rear guard. The static had been so loud, however, his operator was unable to get a receipt for the message. The solo was then dispatched back to the troop CP with a map showing the movements of the 2nd Division which were known at the time. The cyclist left about midnight.

At 12:30 AM, the rear guard finally moved out. Doggedly the scout cars trailed the column toward CR 400. At the crossroad, it crossed the main highway and disappeared to the north. It looked as though the 2nd Division had gone north. The cars approached the highway cautiously. The surrounding ground was very open and was good for cross-country work. There was enough moonlight to give fair all-around observation. About a quarter-mile south of the crossroads, a sign pointed down a trail to the west—"2nd Div-Ord. Dump." At the crossroad, a sentry was surprised and captured. He stated that the 2nd Division had crossed the highway and moved to the north. In the open space to the northwest of the crossroad could be seen the silvery outline of an observation balloon. All was quiet in the moonlight. It was 2:00 AM.

It now began to rain very hard. The scout cars crept across the highway and moving across-country now and then to escape detection, reached RJ 401. Here a sentry from the 36th Division was captured without an outcry. He said that trucks full of doughboys had come up the road and taken the left fork all night. The lieutenant studied his map. He recalled the statement of an earlier prisoner—of an "Attack to the east" by the 2nd Division. Indications pointed to a close-in envelopment by the 2nd Division of the Blue right flank, with the 36th and 45th Red Divisions probably attacking frontally due north. This would give the 2nd Division a direction of attack to the northeast. Later, the lieutenant learned that his "G-2ing" had been correct.

Carefully the section advanced up the left fork. A half mile farther and they came to a small group of tents and motorcycles. A sign proclaimed this to be the "REAR ECH, HQ, 1ST CAV. DIV." A road marker, "CP 1ST CAV. DIV.," pointed up the road. The lieutenant decided it too risky to venture farther north. He decided to return to his own lines via the Red right flank. At 3:00 AM the section reached CRAVENS. Here a multitude of signs and road markers proclaimed the nearby location of the CP VIII Corps and various Corps Troops. Using the secondary road net south of the main highway, the scout cars reached PITKIN without mishap. Here were located Quartermaster, Ordnance, Medical, and other service troops. The section surprised an outpost of the 45th Division from the rear and in the rain and darkness escaped through the enemy lines. It was 4:00 AM.

The static was still so intense that radio reception was impossible. The lieutenant decided to rejoin his troop via ELIZABETH—UNION HILL—HINESTON—LEANDER—LACAMP—SLAGLE. The cars made good time and at 5:30 AM reached SLAGLE. Here was located the CP of the 6th Cavalry; his Troop CP was farther on, near LEESVILLE. He decided to report directly to the Regimental Commander the results of their reconnaissance, and soon he was describing the movements of the 2nd Division to the S-2 on the situation map. He then took his leave of the Colonel and marched toward LEESVILLE. On the way he reported to his Squadron Commander and then a few minutes later to his Troop Commander. The troop was in good spirits, but was disappointed to learn that the 2nd Division would not attempt a wide end run around their flank.

AUTHOR'S COMMENTS

In difficult country, the scout car on reconnaissance is largely road bound. In this situation, the leader can only keep trying to find a route which will enable him to contact the enemy's main body and learn his dispositions and intentions. An alert enemy, however, will have all routes blocked, so that the scout car can never gain contact with the main body. The leader is then forced to make a dismounted reconnaissance under cover of darkness, get around the enemy's security forces, and try to find out what is going on behind the enemy's screen. He can then rejoin his scout cars and get the information back by radio, or other means, in time to do the higher commander some good. Often, in working around the enemy's flank and rear, the scout car platoon may be as many as forty or fifty miles from its troop CP.

The author has often made one of these long night prowls afoot in rear of the enemy's lines and often has wished to high heavens for a horse. It may prove feasible to bring a small trailer (4-horse capacity) with the scout car platoon and under cover of darkness take the route (too long for horses because of the time element) which has already been reconnoitered during the daytime. Near the enemy's outpost, detruck the horses and hide the scout cars and trailer under cover. And then continue the reconnaissance from the back of the horse. *Here is the mechanized, the motorized, and the horse working together in small units in their quest for information.*

☆ ☆ ☆ ☆

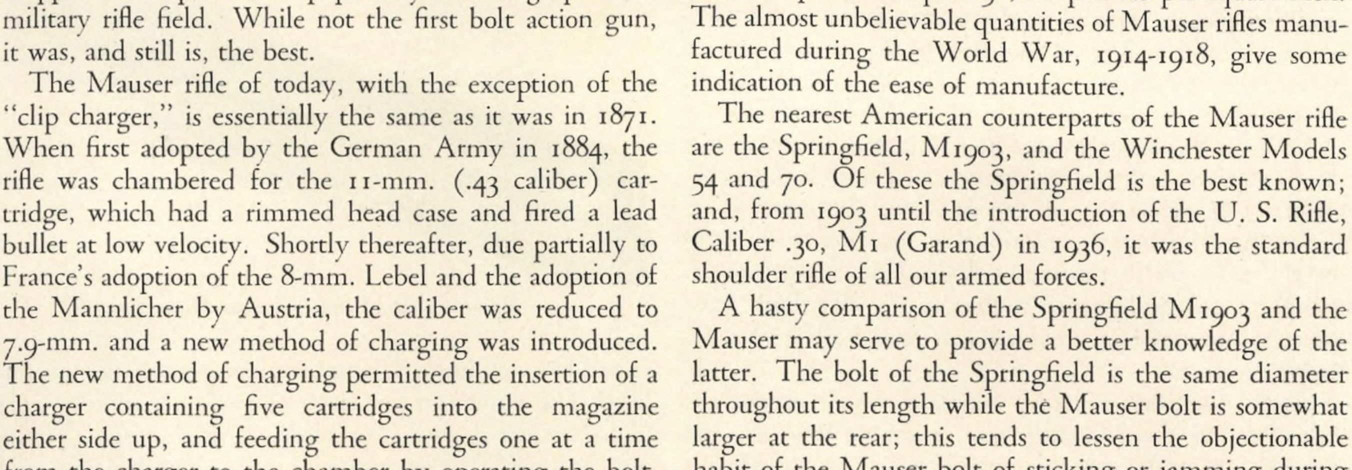
CARDED

The German Mauser★

By W. J. Landen

IF all the center fire rifles in the world were counted and catalogued, more than half of them would trace their ancestry to the original Geman Mauser design. This is true of both sporting and military types, for no other rifle in the history of firearms has ever received such universal acceptance and performed so nobly as has this simple, rugged, almost fool-proof Mauser design. The invention of Paul Mauser, a German, in 1871, its superior features were quickly recognized and it soon outstripped its competitors for popularity in the high powered military rifle field. While not the first bolt action gun, it was, and still is, the best.

The Mauser rifle of today, with the exception of the "clip charger," is essentially the same as it was in 1871. When first adopted by the German Army in 1884, the rifle was chambered for the 11-mm. (.43 caliber) cartridge, which had a rimmed head case and fired a lead bullet at low velocity. Shortly thereafter, due partially to France's adoption of the 8-mm. Lebel and the adoption of the Mannlicher by Austria, the caliber was reduced to 7.9-mm. and a new method of charging was introduced. The new method of charging permitted the insertion of a charger containing five cartridges into the magazine either side up, and feeding the cartridges one at a time from the charger to the chamber by operating the bolt. While this method was a decided improvement, it was not until a year later (1889) that the loading problem was finally solved to complete satisfaction. This was accomplished by means of a clip which held five cartridges so arranged that they could be stripped from the clip into the magazine and retained therein after the clip was discharged. The first model to use this new development was the Belgian Mauser, Model 1889, and this was followed by the Turkish Mauser, Model 1890, and the Argentine Mauser, Model 1891. All of these rifles used the basic Mauser principle and differed only in nonmechanical details.



The German Military Mauser rifle, 7.9-mm. caliber. There is little if any difference between this rifle and the one used by Germany in the War of 1914-18

Some minor changes and a few refinements have been made since 1889, but the basic mechanical principle remains the same. The outstanding characteristics of the Mauser rifle are simplicity, strength, and ease of manufacture. Its easy opening bolt, straight line feed, positive ejection, and simple trigger and sear mechanism class it as one of the simplest of all center fire rifles. Its strength is attested to by the long years of service which it gives under the severe strain of military cartridges developing chamber pressures up to 50,000 pounds per square inch. The almost unbelievable quantities of Mauser rifles manufactured during the World War, 1914-1918, give some indication of the ease of manufacture.

The nearest American counterparts of the Mauser rifle are the Springfield, M1903, and the Winchester Models 54 and 70. Of these the Springfield is the best known; and, from 1903 until the introduction of the U. S. Rifle, Caliber .30, M1 (Garand) in 1936, it was the standard shoulder rifle of all our armed forces.

A hasty comparison of the Springfield M1903 and the Mauser may serve to provide a better knowledge of the latter. The bolt of the Springfield is the same diameter throughout its length while the Mauser bolt is somewhat larger at the rear; this tends to lessen the objectionable habit of the Mauser bolt of sticking or jamming during rapid fire, as it reduces the permissible misalignment when the bolt is open. The bolt handle of the Springfield is bent to place the knob in a more desirable position for opening. On the Mauser, the cocking cam angle is longer than on the Springfield, and gives a better feel during opening; which feature is particularly advantageous in rapid fire with a hot gun. The locking lugs on the Mauser are set somewhat farther back from the face of the bolt than on the Springfield. I know of no sound reason for this, and it is probably the result of some designer's personal ideas. Both types provide adequate strength and serviceability. The reserve or safety locking lug on the Mauser is smaller than on the Springfield yet it is entirely

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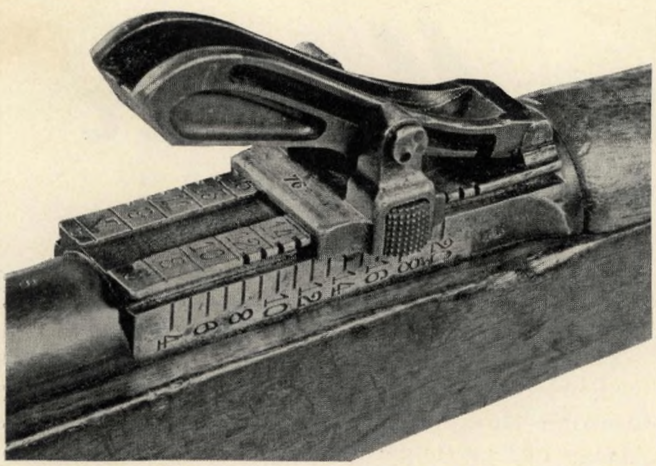
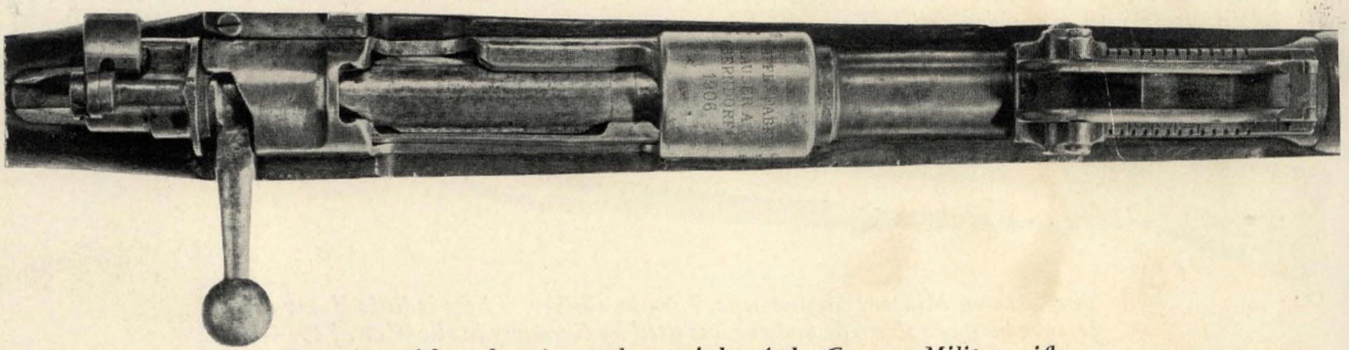
★From *The American Rifleman,* September, 1940.



Rear sight of the German Military rifle. The two sets of graduations are for different weights of bullets

adequate. The Mauser firing pin is one piece, and while this necessitates replacing the entire rod if the point breaks, the number of such breakages hardly justifies the additional cost involved in the manufacture of the two-piece rod and striker of the Springfield, in addition to which the cushioning effect of the play or tolerance in the fit of the striker and firing pin rod does not improve ignition in the Springfield. Other minor differences exist in the ejector, safety lock, sleeve lock and sear mechanism. The superiority of one rifle over the other as regards these features is questionable, and not wishing to be the defender in too many discussions, I will not attempt to pass judgment. Suffice to say that both have their advantages and disadvantages, and both give satisfactory service.

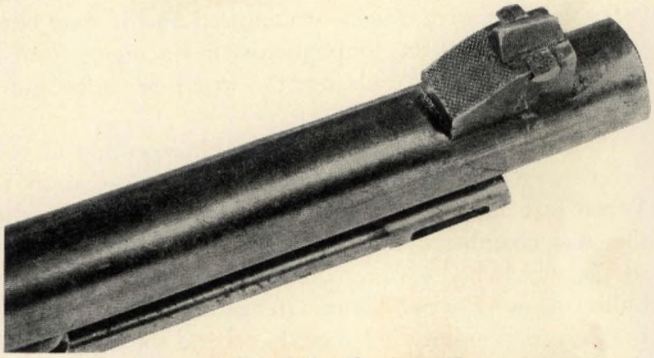


Top view of breech action and rear sight of the German Military rifle

Today there are nineteen countries whose armies use rifles bearing the Mauser name, and two who use the same design under other names. The Springfield M1903 is a Mauser in everything but name, as is the Japanese "Arisaka." Germany, of course, uses the 7.9-mm. Model 1898; Czechoslovakia the same as Germany except for exterior details; Sweden the 6.5-mm Model 1906; Luxembourg the 6.5-mm. Model 1896; Brazil and Chile the 7-mm. Model 1904; and China the 7-mm. Model 1893. Mexico, Colombia and Honduras use the 7-mm. Model 1902; Spain the 7-mm. Model 1896; Uruguay the 7-mm. Model 1908; Yugoslavia the 7-mm. Model 1899; and Belgium and Argentina the 7.65-mm. Model 1891. Ecuador and Peru still stick to the 7.65-mm. Model 1891; Turkey uses the 7.65-mm. Model 1905; and Portugal the 6.5-mm. Mauser-Vergueiro Model 1904.

Nearly every country using the Mauser rifle has its own cartridge, and while the caliber may be the same as that of one or more other countries, the cartridges are seldom interchangeable. And, incidentally, if you have a Mauser rifle be sure that the cartridges you use in it are those which are intended for it. To do otherwise is to invite serious trouble.

MAUSER SPORTING RIFLES



Front sight of the German Mauser

Contrary to American practice, Mauser rifles are made by innumerable manufacturers throughout Europe, particularly Germany. The large factories such as Waffenfabrik Mauser, Simson & Co., and Heinrich Krieghoff, turn out sound, well finished weapons. Many of the smaller and less well known manufacturers are not over scrupulous. The American purchaser of a Mauser sporting rifle will therefore do well to make sure of the origin of the gun he buys if he expects to have a smooth action and fine accuracy for which the design is famous. One of the best ways of being sure of what you get is to buy it from an American dealer in whom you have confidence. He knows which makes are good and will be glad to answer your questions. And don't expect to buy a really good sporting Mauser cheap, for one can seldom be bought for less than one hundred and fifty dollars. Mauser sporting rifles are built in nearly every caliber from the 6-mm. to the 10.75 x 68-mm., three lengths of action being made to accommodate the wide range in cartridge length. The designs are practically identical except for the length.

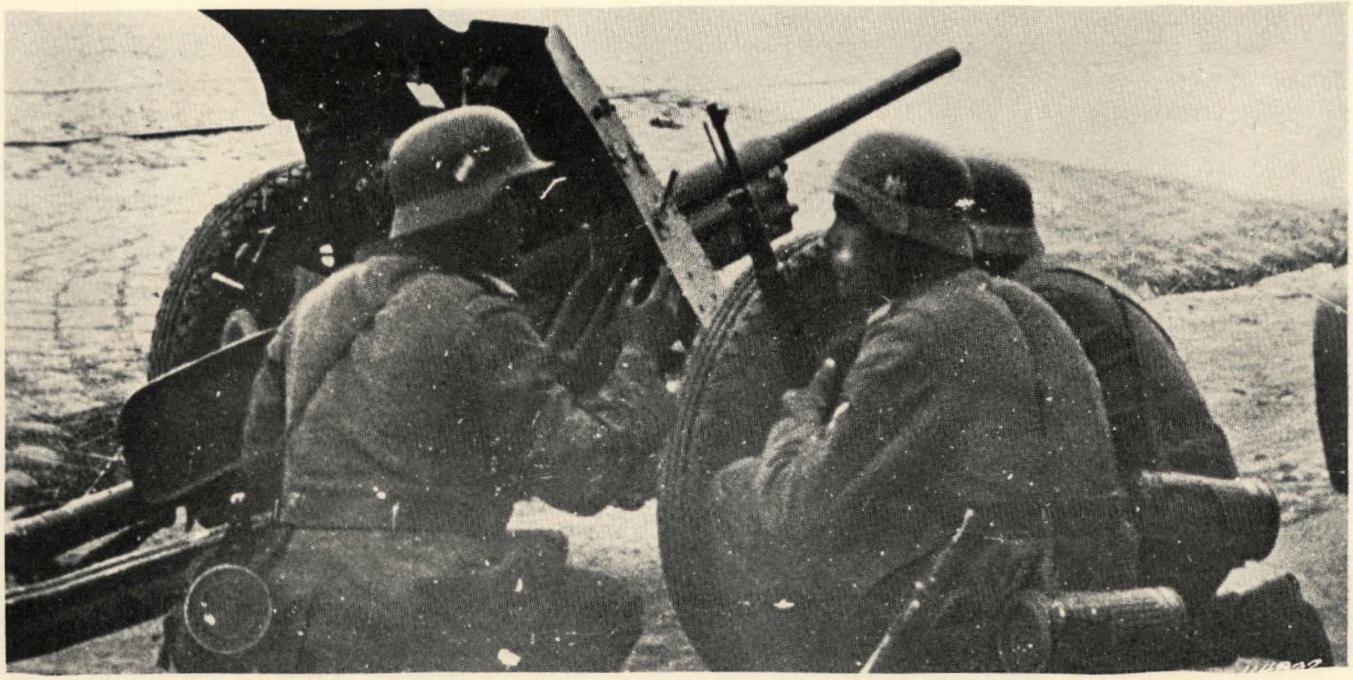
A good Mauser sporting rifle is a possession of which any man can be justly proud, and I know of no more accurate weapon in the world. Fancy stocking, set triggers, fine engraving, and gold inlays, for which the German gunsmiths are noted, cost a good deal of money but don't improve the Mauser's accuracy.

The current standard German military cartridge contains a boat-tail jacketed bullet weighing 198 grains. The charge of 45.3 grains of nitrocellulose powder gives a muzzle velocity of 2,575 feet per second. The bullet is of the pointed type, having an ogival radius of 7 calibers.

Two other cartridges are used for special purposes by certain branches of the service. The first of these has a 154-grain pointed, concave-base, bullet which, with approximately the same powder charge as the standard cartridge, has a muzzle velocity of 2,880 feet per second. The second has a 225-grain round-nose, flat-base bullet which, loaded with about 43 grains of nitrocellulose powder, develops a muzzle velocity of 2,090 feet per second.

The same rimless case is used in all three cartridges. In exterior dimensions this case is very nearly the same as the U. S. Caliber .30 M1 case (.30-'06). It is possible to chamber a 7.9-mm. German cartridge in a worn Springfield chamber, but should the cartridge be fired, disastrous results would be certain to follow, as the bullet diameter is .311-inch, against the Cal. 30's .308-inch.

Two features of the German cartridges are different from those to which the average American is accustomed. First, the primer is of the Berdan type, in which the anvil is a part of the cartridge case instead of a separate component assembled to the primer cup. Two flash holes, one on either side of the anvil, are used instead of the one in our cartridges. Second, the bullet jacket is made of soft steel which has a thin coat of either cupronickel or copper on the outside. Scarcity of copper is the principal reason for this type of jacket.



"Practically every German soldier carries a rifle—and is seldom seen without one."

1940 Cavalry Leadership Test—Small Units

By Major Alexander George, 11th Cavalry

THE Eleventh Cavalry, chosen this year by the Chief of Cavalry to hold the Cavalry Leadership Test for Small Units finished the test with the most gratifying results on October 29th, just two days ahead of the deadline set for the competition.

INDIVIDUAL PHASE

The planning for the individual phase was comparatively easy and in compliance with the directive from the Chief of Cavalry it was drawn up to demonstrate the endurance and ability of the officer acting alone. The regimental commander decided for instructional purposes to require all reserve officers assigned to the regiment to participate in this pase. At a conference of line troop commanders it was decided that the officer in each line troop making the highest score in the individual event would command the platoon within his unit. This caused the judging board to reach a hasty decision later in the competition. Of the four contestants in E Troop, two lost their mounts during the mounted phase and consequently were eliminated. Of the two remaining officers, both had combined scores below the 75% minimum required by the Chief's directive and theoretically could not continue in the competition. However, in view of the fact that all competing officers were comparatively low in final scores, with the leading line platoon commander having but 79%, it was thought that the difference in scores between the four selected platoon leaders was not great enough to handicap seriously the final outcome of the completed test. This seemed a much better solution than that of assigning an officer from another organization to command the E Troop platoon. The individual phase was allotted a one to three ratio to the Leadership Test and was scored on a 200 point basis. The following breakdown indicates the separate award for each event:

1. Map reading, overlays and messages	30
2. Standards of physical requirements	18
3. Mounted phase	90
4. Dismounted phase	62
Total	200

The following narrative will give a general outline of the actual competition:

The contestant drew his number by lottery and was issued a master map and overlay paper. From the master map he prepared a route sketch and entered such other pertinent data as required on a military overlay. He then reported to the judges and was required to high jump three feet nine inches, broad jump 12 feet, chin-up 8 times, push-up 12 times, run 50 yards in 8 seconds, and run 100 yards (with full field equipment) in 20 seconds. Upon the completion of this phase he mounted his horse (mounts had already been warmed up) and proceeded cross country for a little more than 3½ miles. There was a minimum time limit of 20 minutes for this ride and en route were encountered 10 jumps and five pistol targets. The competitor was penalized for overtime, failure to negotiate any of the obstacles and for missing the pistol silhouettes.

At the conclusion of this mounted course the contestant turned his horse over to a horseholder and a judge indicated flags designating an enemy position. He was required by use of message and overlay to inform the regimental commander of the situation. This phase was judged against time, accuracy and correctness of overlay and message.

He then remounted and was instructed to "walk three, trot 7" until arriving at the next check station. This phase required 20 minutes and was required to negotiate a wide ditch and slide en route. Over and under time and failure to take obstacles were penalized.

At the completion of this event horses were inspected for condition, and the competitors started on the dismounted phase. This consisted of a two mile cross country run over very rough country, up and down steep grades, and the minimum time allowance was 25 minutes. At the completion of the run, the contestant was provided with a Garand rifle and eight rounds of ammunition. Silhouettes were fired upon at 300 yards and the pistol range was the next scene of action. With the pistol the competitor fired five shots, one at 50 yards, advanced 10 yards and fired again, and then advanced 10 more yards and emptied his piece.

Upon conclusion of the firing, the contestant was required to secure his field saddle, horse blanket and bridle and run 200 yards.

All in all it was a stiff course and required stamina, endurance and a demonstration of certain military knowledge and horsemanship. Remembering that all contestants were officers who but recently had been ordered to active service, the results were considered most gratifying. All 21 contestants, with the exception of two unfortunates who were policed during the jumping phase, completed the course. The system of scoring was most rigid and resulted in comparatively low scores, but it was the belief of the judging board that everyone had amply demonstrated their physical ability to take the field. These officers were all busily engaged with their organizations in a 44 hour weekly training schedule and conditioned themselves in other than duty hours. There is not one, in the opinion of the writer, who has not materially improved his cavalry efficiency by preparing and participating in this test.

LEADERSHIP PHASE

The platoon phase was initiated two days after the completion of the individual test, Sunday intervening. Warning orders were issued the day before specifying the hour of departure and the initial point. Platoons were informed they were operating in hostile territory with enemy mechanization and aircraft active. In all, each competing platoon was confronted with eleven tactical situations, three changes of mission and one combat problem involving live ammunition.

The tactical situations presented for solution by the platoon commanders required generally:

1. The conduct of the platoon acting as the advance party of an advance guard.
2. The platoon acting in the capacity of a combat patrol.
3. The occupation of a defensive position.
4. Bivouac for the night and establishment of outpost.
5. A night alert and the formation and conduct of a night reconnaissance mission.
6. The conduct of the platoon to seize and hold a position on the flank of the squadron. This phase included the use of ball ammunition.

During the execution of the above missions, assumed, indicated, and actual enemy were encountered at various times. The rapid succession of varied situations, the difficulty of terrain, and the confusion that was added due to the fact that the platoons were forced to operate over areas that were being used concurrently by units of the 7th Division, presented to the platoon leaders of limited service and experience very difficult problems.

All situations can not be incorporated within a narrative description of limited length, but the following is a brief synopsis of the action of the platoons.

After being given the general situation, the platoon started on the problem acting as the advance party of an advance guard. Umpires controlled the advance by messages and other pre-arranged information. During this phase the platoon was the subject of attack by aircraft and the point was attacked by a squad of mounted cavalry.

In one platoon led by Lieutenant Hendricks of A Troop, just prior to the mounted attack a platoon of 7th Division doughboys in denim crashed through the woods and were immediately pounced upon by the cavalry. It took some excellent diplomatic work on the part of the umpires to extricate the competing platoon from this unexpected skirmish and some tall explaining to the doughboy commanders.

Shortly after the mounted attack, the competing platoon was relieved from advance guard duty and given a combat reconnaissance mission on the flank of the assumed marching regiment. Platoon leaders were warned of enemy mechanization and were instructed to engage isolated scout cars. Three of the platoons proceeded cross country in column of flock with a covering detachment to the front, one platoon used an excellent dispersed formation while going through cover, but for some unfathomable reason closed to a column of twos while crossing one of the few open areas and was caught completely unprepared when fire was opened upon them by a well camouflaged scout car. In fact the scout car was so well camouflaged that even umpires who were conversant with the situation had difficulty in determining its position. Two platoon leaders diagnosed the opposition as a machine gun nest and were somewhat bewildered at the rapidity with which the position was displaced to the rear. The A Troop platoon was conceded a "max" on this phase. Upon being fired upon, the platoon in its dispersed formation quickly took cover to the flank, put down its assumed machine gun squad and a half rifle squad as a holding force and moved rapidly to the left rear of the scout car, dismounted and opened fire on the scout car with its assumed armor piercing ammunition. Cover was excellent and the maneuvering force was able to open fire unexpectedly on the enemy position at a range of about 100 yards.

After the umpires ruled the scout car out of the picture the platoons were allowed to continue their march to Blanco Gate where they received instructions from the regimental commander to establish a defensive position in a given sector with especial emphasis to roads and trails. All platoons stated they would establish roadblocks but were quite indefinite when confronted with the task of building blocks without tools or material.

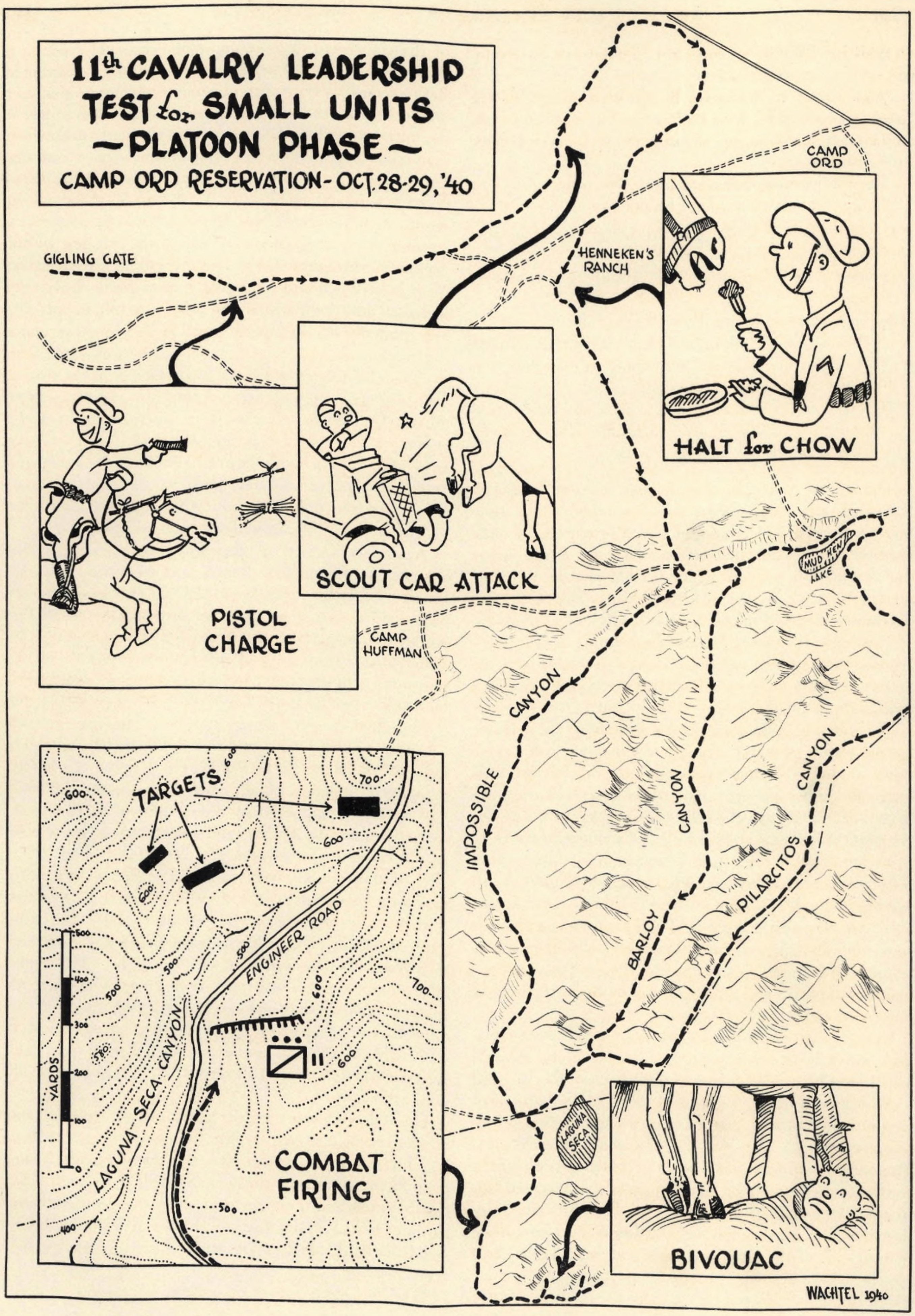
At the conclusion of the defensive phase, platoons marched to Hennekens Ranch and went into bivouac. Outposts for the night were planned but positions not occupied by other than the original march outpost. The parent troops were permitted to feed the competing platoons administratively and during this armistice in the hostilities umpires and competitors went to town on a hot meal.

The platoons were alerted at hourly intervals, given a warning order and instructed to saddle out. Actual orders were issued later and platoons were given a mission of night reconnaissance. Each platoon was ordered to send one squad through each of three canyons on reconnaissance (Impossible, Barloy, and Pilarcitos) and assemble after completion of mission at Maria Fields Ranch. In each of the canyons were stationed enemy sentry posts that were captured by the respective squad patrols and furnished information of the enemy. After the reassembling of the platoon, the platoon leader was instructed to bivouac for the remainder of the night. The night reconnaissance phase was most interesting. There was no trace of moon or stars and intermittent rain added to the difficulties of the patrols. In general the phase was well executed and although some patrols failed to find their proper routes of march, all arrived at assembly areas in good style.

The following morning the platoons were given a new mission best illustrated by the following order:

"Our Air Force reports that the enemy made a surprise landing in the vicinity of SEASIDE at 2:00 A.M. this morning and is occupying a defensive position along the line: WELCH RIDGE—GRANT EWING RIDGE—MERRILLIS HILL. A small force of cavalry has been observed.

"The Squadron moves at once to a position on IM-



11th CAVALRY LEADERSHIP TEST for SMALL UNITS

~PLATOON PHASE~

CAMP ORD RESERVATION - OCT. 28-29, '40

GIGLING GATE
HENNEKEN'S RANCH
CAMP ORD
HALT for CHOW
SCOUT CAR ATTACK
PISTOL CHARGE
CAMP HUFFMAN
MUD HEN LAKE
CANYON
IMPOSSIBLE
CANYON
BARLOY
CANYON
PILARCITOS
TARGETS
700
600
500
400
580
ENGINEER ROAD
LAGUNA SECA CANYON
YARDS
500
400
300
200
100
0
COMBAT FIRING
LAGUNA SECA
BIVOUAC
WACHTEL 1940

NOT U. S. PROPERTY
29948

POSSIBLE RIDGE to cover the deployment of our infantry.

"Move with your platoon by the shortest established route and seize WOLFE HILL, blocking roads and trails to the north and west and securing the left (south) flank of the Squadron.

"Establish contact with Squadron south flank."

The movement forward to the pre-arranged firing line was regulated by the umpires who prescribed safety precautions found necessary due to the fact that the 7th Division was operating in nearby areas.

When the point gained contact with the first group of targets, he was notified by the umpire:

"Your point receives heavy rifle fire from the vicinity of where you see the silhouette targets. The enemy is estimated as at least a platoon with light machine guns attached.

"Give me your orders as you would issue them to your squad."

After the platoon leader came forward and received information from the point commander, he was allowed to make a decision with no terrain limitations. After hearing the plans of the platoon commander, the judges then notified him of safety precautions and indicated the firing line that had to be occupied. Horseholders were furnished for led horses in order that the platoon might put its maximum firepower on the line.

Targets were distributed in three groups with ranges varying from about 350 to 700 yards and were controlled by the umpires in charge. The terrain was such that range estimation was extremely difficult and in most cases ranges had to be adjusted after initial firing. One platoon, against standing orders, had their scouts open fire with tracer ammunition and made accurate estimations. 7th Division orders prescribed that tracers were not to be used due to fire hazards, so unfortunately it was necessary to penalize this officer's ingenuity on a time basis. Although this was the first time that combat problems had been conducted by the regiment with the new Garand rifle, results were excellent. Use of cover, handling of led horses and the building up of firing lines were executed in a thorough manner, and although the problem was artificial due to limited area and safety precautions, it was thought that the combat phase was one of most interesting of the entire test.

Upon completion of the firing problem, platoons marched back to the Presidio and again underwent an exhaustive inspection of mounts and equipment.

After the pros and cons of tactical solutions were thoroughly thrashed out, and the statistical compilation accomplished, the judges reached their final conclusions. The outcome of the contest hung in the balance throughout the competition, and the post-mortem discussions by competing personnel proved conclusively that their respective platoon had undoubtedly brought home the bacon. In fact each of the competing platoons was first in two of the eight general divisions of the test. The winning platoon piled up its victory margin by its consistently high average and not through being outstanding in any one phase. Second and third places changed hands due to the difference in the scores of the individual phase between platoon leaders. The value of the test from a training standpoint can not be over-emphasized. In the critique that followed the completion of the test all officers of the regiment were taken over the area and junior officers called upon to solve the various situations. It is felt within the regiment that the newly assigned officers have received more beneficial cavalry training as a result of these tests than any other schedule that has been accomplished.

Certain deficiencies were noted regardless of repeated emphasis made during preparation. The following were the most prominent mistakes:

1. Failure to take advantage of cover and terrain features.
2. Lack of complete reconnaissance, especially on the part of subcommanders.
3. Slowness of gait when moving across country and failure to move by bounds.

UMPIRING

The test was of such a nature that it was anticipated that several officers would be necessary to judge certain phases of the test. Because of the present strength of experienced officers and since the regimental commander did not desire to use any personnel directly assigned to any of the competing organizations, the assignment of umpires was a most difficult problem. This was solved, finally, by assigning a regular officer from the Provisional Squadron or Regimental Staff to each platoon, and then a separate group to be present at each important phase. Umpires were provided with scoring sheets listing continuing subjects that were apt to recur throughout all phases, such as security, reconnaissance, concealment, clarity of orders, etc., alphabetically classified. In this way the composite ratings for such general subjects were compiled at the completion of the test from a composite score sheet of all umpires concerned. Platoon umpires changed platoons periodically, and this, in conjunction with the special umpire group, assured a cross-section of opinion, rather than an individual rating of one umpire.

CONCLUSION

In general the test was a great success. The enthusiasm of all personnel, and the coöperation of all who helped to conduct the test were of the highest order. Although the leadership of the inexperienced platoon leaders was sometimes at fault, these very mistakes will prove of inestimable value in their future training. For the most part solutions to all problems confronting the platoons were logically solved and carried out with that energy and aggressiveness so characteristic of the cavalry service.

Unit Training Activities

Fifth Cavalry

Colonel Henry J. M. Smith, *Commanding*

Training activities for September and October consisted of the completion and performance of basic unit training and the preparation for and conduct of supplementary target practice.

The Rifle Troops, Machine Gun Troop, and Special Weapons Troop concentrated their efforts on smartness and precision of close order drill, rapid and flexible maneuver of all units up to including the troop in extended order training, instruction in the use of their principal weapons, and formation and conduct of security detachments. This training preceded two weeks of supplementary target practice.

Headquarters, and Headquarters and Service Troop stressed for the same period basic instruction for the Communications, Scout Car and Motor platoons.

Due to the receipt of twenty remounts, our training program was augmented to include their training which started on the 24th of September. On October 13th we received another shipment of 55 animals which were assigned to the troops on the 31st of October. These animals will also be trained under a regimental remount program.

School for buglers commenced October 1st under the supervision of the Band Leader. Men attending this training were required to attend all military duties in the morning but were free in the afternoons to attend buglers school.

Motor Drivers' School was conducted at the Post Motor Pool daily except Saturdays, Sundays and holidays starting Tuesday, October 1st. Two men per troop, with previous motor experience were detailed to the school. The course was completed October 12th with fourteen men receiving certificates of proficiency as motor drivers. This group of men established a reserve of motor drivers.

The School for Reserve Officers on extended active duty with the 5th Cavalry was concluded on October 16th. The applicatory system of instruction was used. The subjects covered in the school included Horsemanship, Horsemastership, Officers' Orientation Course, Drill, Troop Administration, Cavalry Weapons, Care and Adjustment of Horse Equipment, Motor Maintenance, Communications, Defense Against Chemical Attack, Court-Martial Duty, Guard Duty and Reconnaissance Technique. Only officers with records of proficiency in any of the above subjects were excused. All officers were graduated and a short graduation exercise was held on the morning of October 16th. The Regimental Commander spoke to the assembled officers at this exercise and he chose for his subject "Qualities Necessary In A Cavalry Leader."

The Supplementary Target Practice for this regiment commenced October 14th. The 5th Cavalry has but 65 per cent of its authorized M-1 rifles, however, this type of weapon was used by all personnel participating in rifle practice. The present M-1 rifle strength is augmented by Springfield rifles to the extent that all personnel authorized a rifle is equipped with one. The primary purpose of the Supplementary Target Season was to teach men how to shoot and prepare them for combat practice firing. The Instruction Practice consisted of firing over a course prescribed by the 1st Cavalry Division. Upon completion of the instruction practice all Springfield Rifles were targeted so that personnel equipped with same would be prepared to use their weapons effectively.

All men who are required to fire the pistol mounted and who did not fire in the Regular Target Season were required to fire during the Supplementary Season. This provision resulted in having men with very limited amount of service participating in Mounted Pistol Practice.

The Instruction Practice for all authorized automatic weapons consisted of firing over courses prescribed by the 1st Cavalry Division. The Caliber .50 Machine Guns of the Scout Car Platoon were fired from ground mounts due to lack of vehicular mounts.

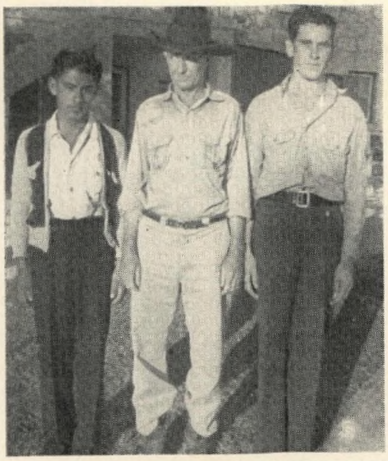
Recruits completing the 30 day Regimental Recruit Schedule were turned to duty with their respective organizations at dismounted evening parades on October 11th, 18th, and 25th. Recruits completing their training were formed on the right of the Regiment and perpendicular to the line of troops. When the Adjutant published the orders, the recruits were marched to the center of the Regiment and the following announcement made:

> "The Post and Regimental Commander desires at this time to commend all members of the Recruit Detachment and their instructors on completion of their strenuous recruit training schedule. He wishes you all a pleasant, interesting and active future in the Regular Army of the United States and urges you to conduct yourselves in such a manner that your army records will always show honest and faithful service.
>
> Troop Recruit Detachments are hereby returned to full duty with their respective troops."

Recruits then joined their respective organizations and marched in review with the regiment.

The men in the photograph typify the recruits being received by this regiment. The photographs compare the men at the time of enlistment and at the end of their recruit training.

On Saturday, October 26th, the Trains (less kitchens) and Scout Cars 5th Cavalry were loaded in compliance with Special Training Memorandum Headquarters 1st Cavalry Division. The truck loads consisted of 100 per cent ball ammunition and organization equipment listed



← **BEFORE**

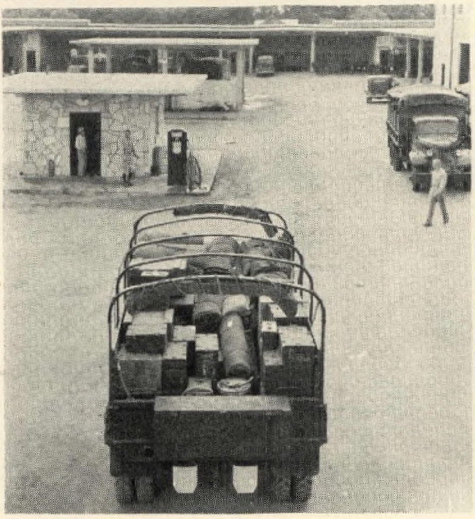
and AFTER →

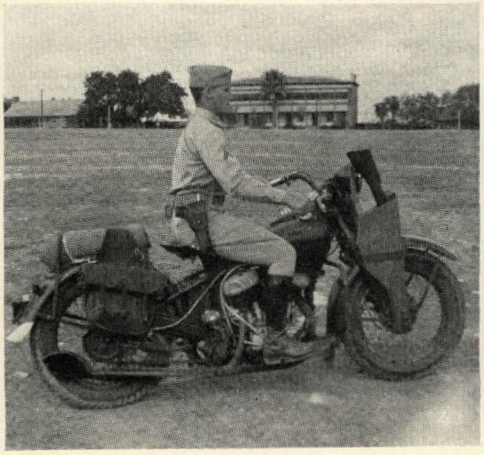
RECRUIT INSTRUCTION

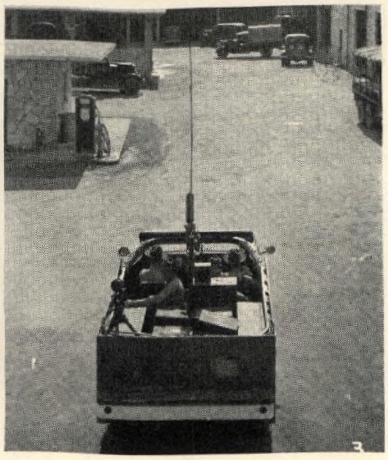
~

PRESCRIBED
MOTOR
LOADS

↙ ↓ ↘







in Column 2, Tables of Basic Allowances (less figures in parenthesis) plus squad blanket rolls. The Scout Car loads consisted of ammunition for authorized armament and individual equipment of crew. The results of the loading were satisfactory and proved the necessity for a revision of the present Table of Basic Allowances. Recommendations for a revision of the Table of Basic Allowances are being submitted through official channels. Due to shortage of authorized transportation two rifle troops were required to load on one vehicle and loads were in excess of the prescribed amount. Scout Cars do not have a suitable method prescribed for carrying the extra wheel and tire. When loaded with the prescribed amount of ammunition for heavy machine guns the scout car is over loaded 275 pounds and with the extra wheel and tire the over load is 540 pounds. The present prescribed amount of ammunition for heavy machine guns occupies so much space in scout cars that the crew is denied sufficient room for functioning. The present motorcycle solo and motorcycle side car have no prescribed method of carrying extra ammunition drums. Photographs of the various vehicles when loaded are above shown.

On October 29th at 2:30 PM, the regiment was alerted under the provisions of "The Alert Plan for Fort Clark." All elements were in position at the end of one hour and twenty minutes. This was considered excellent time as all troops were engaged in their regular training. One squadron was on the rifle range and other troops were on the mounted pistol course and some were firing on the .22 caliber range when the alert was sounded. The troops moved out of the post and were halted in column of masses on the Drill Field. Brigadier General John Millikin, U. S. Army, who took command of Fort Clark and the 1st Cavalry Brigade on October 26th, inspected the troops. After the inspection, all elements passed in review and returned to the post for dismissal.

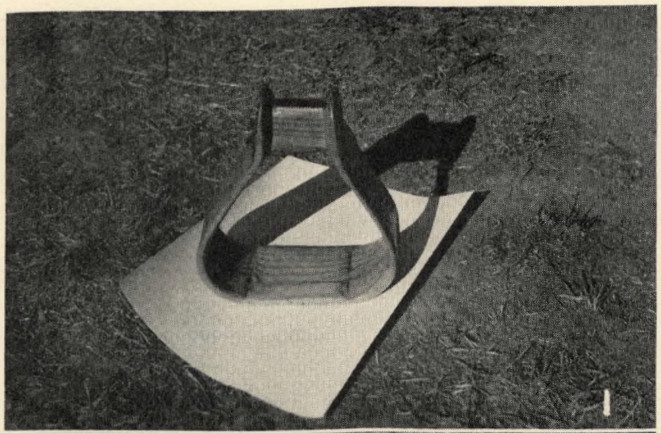
* * *

Notes On Modification of McClellan Stirrups and Stirrup Straps

The McClellan saddle has been found through many years experience to be the best saddle yet devised to carry the Cavalry trooper, his arms and equipment in campaign. There are however, some features of the modified saddle that are believed still possible of improvement, namely the stirrups and stirrup straps.

Captain James O. Curtis, 5th Cavalry, has experimented with the modification of the McClellan stirrups and stirrup straps. It is believed that his modification lends to more comfort for the rider.

While in most regiments the hoods have been removed and the tread cut down to a comfortable two to two and one-half inch width, it is nevertheless believed that the bar should be rasped down smoothly (see Figure 1). This



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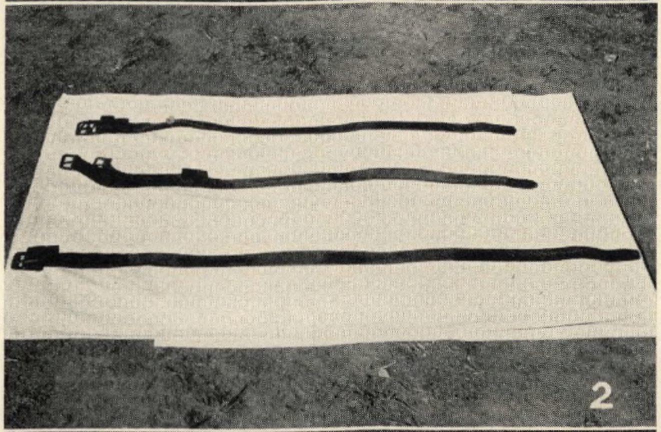

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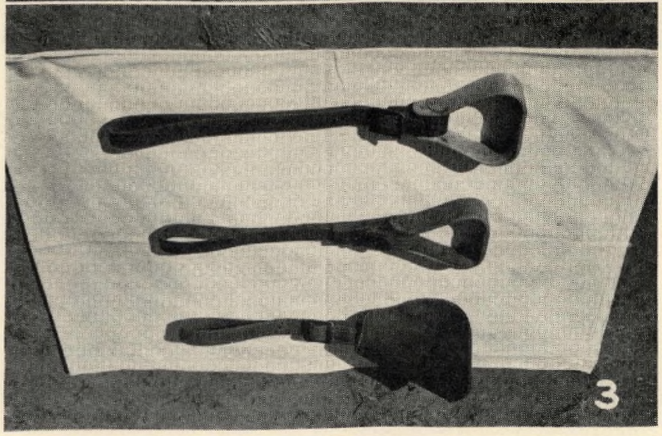

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alteration makes the stirrup hang so that the inside of the tread is lower than the outside and will more easily permit the foot to rest on the inside of the tread, allow the ankle to break more naturally, and thus induce the lower leg to remain in light, elastic contact with the horse's side.

Since the issue stirrups strap must be modified, the modification as shown (see Figure 2) is recommended. This modification not only prevents the stirrup from revolving in the strap, an important consideration in mounting and dismounting rapidly, but puts the keeper low, where it will not "lump" and rub against the shin. This allows the smooth side of the strap to rest flatly and comfortably against the inside of the leg. Leaving the buckle "as is" provides, in effect, a keeper for the loose end of the strap, which may be cut to correct length by a saddler.

Viewed as a unit (Figure 3) the Curtis modification seems to be just as easily made as the previous one, the strap and stirrup will give just as much service, will be much more comfortable, and will allow the individual rider to more naturally conform to the requirements of the prescribed military seat.

NOTES: *Figure 2*—The lower strap is the one as issued. The center strap is the one as previously modified. The top strap is the Curtis modification. *Figure 3*—The top stirrup and strap is same as issued. The center stirrup and strap is as previously modified. The lower stirrup and strap is the Curtis modification, the side of the strap towards the ground is adjacent to the rider's leg when in use.

* * *

6th Cavalry (Horse-Mechanized)

LIEUTENANT COLONEL JOHN A. CONSIDINE,
Commanding

On October 6th the regiment congratulated Brigadier General John Millikin on his promotion. Lieutenant Colonel John A. Considine assumed command of the regiment on his arrival, October 7th.

The 6th Cavalry had a review, on October 14th, honoring its new regimental commander. This review marked the first appearance of our complete portée equipment at such a formation.

Three days later another review was held in honor of General John K. Herr, Chief of Cavalry, who was making us a brief visit, and our departing Commanding Officer Brigadier General John Millikin.

When Brigadier General and Mrs. Millikin left the post on October 21st, for their new station, Fort Clark, Texas, the regiment formed in two lines facing each other. Starting in front of General Millikin's quarters, the horse squadron on one side faced the mechanized squadron on the other.

The remainder of the regiment, dismounted, extended, both lines to the gate. Brigadier General Millikin, standing beside Lieutenant Colonel Considine in a scout car, passed between these two lines, receiving his last salute from the 6th Cavalry as its Commanding Officer.

The 1st Squadron (Horse) spent from September 20th to October 10th at Catoosa Rifle Range shooting the new course for the M-1 Rifle. Excellent results were achieved.

The 2nd Squadron (Mechanized), less Troop G, was at Fort McClellan, Alabama, for its range season, September 17th to 20th. All members of the squadron fired the .50 caliber machine gun and the heavy machine gun from the scout car, both moving and stationary, at both moving and stationary targets. Both guns were also fired from the ground at moving and stationary targets. Although there was little basis for comparison with previous vehicular firing, Lieutenant Colonel Thomas J. Heavey said the results were excellent.

Troop G was at Fort McClellan September 22nd-27th. All members of the troop fired the .50 caliber machine gun and heavy machine gun from scout cars, moving and stationary, at both moving and stationary targets. The M-1 rifle was fired after coming into action front from moving motorcycles, at both fixed and moving targets. Excellent results were achieved.

Since five National Guard regiments are to be organized as Corps Reconnaissance Regiments, regimental commanders and the staffs of the regiments concerned were ordered to Fort Oglethorpe for the week of October 13th-19th for instruction and observation of the functioning of the 6th Cavalry.

The following National Guard Officers were ordered here for the week of October 13-19, 1940:

- *101st Cavalry, NYNG:* Colonel Gilbert Ackerman, Major Walter R. Lee, Major William C. Roberson.
- *102nd Cavalry, NJNG:* Colonel Henry L. Moeller, Lieutenant Colonel Cecil M. Boycott, Major John V. Brown, Major Donald A. MacGarth.
- *104th Cavalry, PNG:* Lieutenant Colonel Albert H. Stackpole, Major Robert C. Lutz, Major William A. E. Leitzinger.
- *106th Cavalry, ING:* Colonel Buchanan, Major Mark Plaisted, Captain Roy D. Keehn, Jr., Captain Maurice G. Peter.
- *107th Cavalry, ONG:* Colonel Woods King, Major Julian M. Andrus, Major William W. Johnson.

Due to intensive training and lack of time to put on the usual festivities, the fall horseshow was reduced to an afternoon of hunter trials and another afternoon of three jumping classes and a Ladies' and Children's Hack Class on November 2nd.

* * *

Sixth Reconnaissance Troop—Fort Riley, Kansas

MAJOR M. E. JONES, *Commanding*

The Sixth Reconnaissance Troop, which was activated in August at Fort Riley, Kansas, and composed of recruits from Arkansas who arrived during September, has started to roll with the delivery of four scout cars, October 23rd.

The Troop at present is badly split up, with eighty men attending the Post Radio School, two in Clerks' School, two in Mechanics' School, two Cooks' and Bakers' School, one at the Signal School, Fort Monmouth, New Jersey, and one at the Motor School, Fort Holabird, Maryland, Lieutenant Brackett is a member of the Motor School and Lieutenant Creamer a member of the Communication School at the Cavalry School, Fort Riley, Kansas.

Concurrent with the above Post Schools, various troop schools are being conducted. A weapons school is held daily for instruction in all troop weapons, and firing with the machine gun, rifle, and pistol on the troop 22 Cal. indoor gallery range. At present 46 men are undergoing instruction in troop recruit school. A school for Officers and Noncommissioned Officers is held three days each week. A drivers' school using the four vehicles which have arrived, is held each day.

* * *

7th Cavalry—Fort Bliss, Texas

COLONEL F. GILBREATH, *Commanding*

Since the last issue of The CAVALRY JOURNAL the Seventh Cavalry has expanded to its war strength of 9 troops and almost 1,300 men. In order to accomplish this large increase, one of the squadrons has been moved into a tent camp for housing. The reception of more than 600 recruits into the regiment has been accompanied by many changes in officer and noncommissioned officer personnel. In spite of these many changes the regiment is progressing due to the wise recruit training program prescribed in the 1st Cavalry Division. Six weeks of intensive training turns a recruit to duty well grounded in the duties of a soldier and capable of riding and shooting all weapons with which he is equipped. During this period of expansion, small unit leadership has been stressed so that the squad and platoon commanders have gained experience in handling their own particular men.

On November 12th, the regiment had a week's hike into the field as a means of giving further experience to the young recruit and his young squad leader.

On Armistice Day, the colorful Seventh Cavalry Band with a war strength mounted troop and other units from Fort Bliss paraded through streets of El Paso. Lieutenant Colonel J. W. Cunningham, the executive officer of the Seventh Cavalry was in charge of the Army's part of this parade.

In the field of sports, the Seventh continues to be well represented. Machine Gun Troop won the softball championship after an interesting series of games within the regiment. The same troop is now far in the lead in the basketball competition. The regimental softball team is in a favorable position to win the post softball championship, having defeated both the 8th Cavalry and the 82d Field Artillery. October 12th and 13th found the regiment competing in the division horse show. The Seventh won 2 first places, 5 second places, and 5 third places. In a hard fought game the Seventh defeated the University of Arizona polo team 8 to 7.

* * *

Eighth Cavalry—Fort Bliss, Texas

COLONEL JOHN K. BROWN, *Commanding*

The regiment, upon its return from the August maneuvers, began its reorganization as a nine troop regiment and intensive recruit training. The transfer of a part of the seasoned noncommissioned officers to the new troops reduced the number of drill masters available to handle recruits. From a strength of slightly over 400 in early June the regiment was recruited to 1,350 by the end of October. The large number of recruits brought back memories of the 1917-18 problems of training.

The platoon was made the training unit, each platoon being handled by a noncommissioned officer with another as assistant whenever practicable. All of the platoons whose training started concurrently were grouped under a senior sergeant for barracks and messing supervision and for coördination of training. Squad leaders and assistant squad leaders, in an acting capacity, were designated from the more competent of the recruits. These men rendered valuable service on the drill field and in barracks. Eventually these acting leaders were marked by tabs worn under the hat insignia. These men were given opportunities to exercise command and assisted greatly in basic training to fit them for promotion in due course of time.

Running concurrently was a remount group engaged in horse training. The number of remounts under training is increasing and is expected to assume considerable importance in the near future.

Aside from recruit and remount training the regiment began its supplementary target season the middle of October. In order to get started on tactical training of the regiment, abbreviated courses were fired. However, time was found to have a large number of the enlisted men of rifle troops fire the Light Machine Gun in addition to the rifle. The majority of the personnel to fire were recruits newly returned to duty and officers who have recently joined.

On October 14th Colonel Joseph P. Aleshire was detailed in the Inspector General's Department and gave up command of the regiment. The regiment and his host of friends at Fort Bliss paid him many tributes prior to his departure for Chicago, Ill.

* * *

10th Cavalry Second Squadron (less Troop F) and Machine Gun Troop—West Point, N. Y.

LIEUTENANT COLONEL MARION CARSON, *Commanding*

The Squadron has just completed its 1940 target season. During this season the heavy machine gun, light machine gun, M-1 rifle and pistol were fired for the first time since the Squadron's reorganization in 1939. Thirty-caliber practice was restricted to the 1,000 inch range as no range for field firing is available at West Point. The results were very gratifying, especially as every enlisted man was firing a weapon different from any he had been required to use in previous target seasons.

The contemplated concentration of the Tenth Cavalry at Fort Riley, Kansas, will draw heavily on the older men of the Squadron at West Point. In preparation for the separation of the Squadron from West Point and the formation of a new "U.S.M.A. Cavalry Squadron," the present organization is being recruited up to a strength of four hundred men by voluntary enlistment. Recruit training is already well under way. This instruction will be expedited in order to have these men ready to take over their new duties when the move is made.

The Squadron has been called on to furnish many cadres. Eighteen non-commissioned officers were transferred in August to help activate four new units, the 349th Field Artillery, Fort Sill, Oklahoma, the 41st Engineers, and 1st Battalion, 76th Coast Artillery (AA), Fort Bragg, North Carolina, and the 1st Chemical Company (Decon.), Fort Eustis, Virginia. Two non-commissioned officers left for Fort Dix, New Jersey November 1st to assist in organizing the reception center. They are expected to return in February. Two non-commissioned officers and a private first class are on temporary duty with the Recruiting Service in New York City and nine privates first class and privates have been transferred to the 40th Ordnance Company, Raritan Arsenal, New Jersey.

On October 5th and 6th Captain E. H. J. Carns, with the assistance of Captain F. W. Barnes and Captain R. W. Fuller, conducted a march and tactical exercise for eleven first classmen from the half of the Corps not accompanying the team to Cambridge, and thirty-seven recently-enlisted men The cadets have been taking cavalry branch instruction and acted as officers and non-commissioned officers during the march. The experience with enlisted men of short service gave the cadets an idea of their problems with selective service men next year. Weather permitting, a similar march will be made on November 16th and 17th, in order to afford an opportunity for the remainder of the branch instruction cadets to receive the same experience.

* * *

11th Cavalry—En Route to Seeley, California

LT. COL. JOHN T. MCLANE, *Commanding*

After two months of uncertainty as to its rôle and station in the rapidly expanding military service, the 11th Cavalry is squared away—and on its way—on a new and interesting mission: "Border" service in the San Diego-Yuma area with permanent station at Seeley (near El Centro) California.

The Regiment, led by Lieutenant Colonel John T. McLane, will entrain November 15th at Presidio of Monterey and three days later will be unloading its horses at the new station. One squadron, under Lieutenant Colonel Wayland B. Augur, will occupy a subpost at Campo, in the San Diego mountains. Colonel Augur, with an advance detachment of 148 men of Troops "B" and "F," left the Regiment November 4th to prepare tent camps on the border.

First tagged a "temporary" move to relieve housing conditions at the over-crowded Presidio of Monterey, the change of station was announced as a permanent move November 3rd. At the same time it was learned that funds in the neighborhood of $90,000 had been earmarked for construction of cantonments at Campo—indicating a second "permanent" change of station for the bulk of the Regiment later.

During the past two months the Regiment has embarked upon a course of intensive training in which was sandwiched the new target season and the Cavalry Leadership Test for Small Units. Due to the crowded schedule the leadership test had to be taken in stride. An account of the competition appears elsewhere in this issue.

During the month of September Regimental inspections were held by Colonel McLane of barracks, stables and training on successive Saturdays. Most comprehensive was the inspection of training, when selected squads of each of the six troops were put through their paces in such subjects as mounted and dismounted drill, equitation, first aid and machine gun instruction. Organizational field equipment was inspected October 25 as part of the preliminary

HUACHUCA
FT RILEY
ALASKA
W.

"Now, let's see! Where the heck is CAMPO?"

activity in connection with the move to Southern California.

In a last-minute re-shuffling of staff officers due to the impending trip Lieutenant Colonel Alton W. Howard has been assigned to the staff as S-2, S-3, replacing Major Alexander George, who retains command of the 1st Squadron. Colonel Howard was formerly on post special duty as Post Exchange officer. Major Lyman L. Judge, on special duty as Fort Ord Adjutant, is to be assigned to G.S.C. and will not accompany the Regiment south. Lieutenant Colonel Harold M. Rayner has been assigned to the Regiment and is on detached service en route to join. Lieutenant Robert E. Maxwell, of this year's class at the United States Military Academy, joined the Regiment October 14th and has been assigned to Troop F.

* * *

12th Cavalry—Fort Brown, Texas

COLONEL ARTHUR E. WILBOURN, *Commanding*

The period of the last two months has been spent at Fort Brown, Texas, in conducting an intensive training program. Special emphasis has been laid on the training of recruits and remounts. During the last two months, over three hundred recruits have been turned to a full duty status and are satisfactorily performing their duties. In addition, since August, some one hundred additional recruits have been received and are now under instruction. It is anticipated that the bulk of these will be turned to duty within the next month.

Two hundred remounts have been recently received from the Fort Reno Remount Depot. The time required for training this group has been greatly reduced due to the excellence of the animals received. They have been very good, not only in conformation and breeding, but also in flesh and physical condition. All horses received indicate considerable training at the remount depot.

The 12th Cavalry training objective is to prepare the regiment to take the field for divisional training after the first of the year. Specialists and noncommissioned officers schools have been established and are functioning well. The entire regiment has engaged in range and combat firing. Continued drill in musketry and marksmanship are beginning to show satisfactory results. Training in minor tactics is progressing satisfactorily. All training has been planned to encourage leadership, initiative, and resourcefulness among all grades of commanders.

Two new units, "C" Troop and Special Weapons Troop, have been activated, employing trained cadres from existing units. The new units are now "Standing on their own legs."

Approximately $200,000.00 of new construction of a semi-permanent nature is now in progress. This construction includes Bachelor Officers' quarters, additional stables, mess halls and barracks. The stables have been so designed that they may be easily converted into motor sheds by the removal interior partitions.

Twenty-six reserve officers, detailed on extended active duty, have reported at Fort Brown since August. It is the policy of the Regimental Commander to place full responsibility on these officers as soon as an initial training period of about a month has been completed. This policy has proved satisfactory. The new commissioned increment has filled a long time need for additional officers.

* * *

Second Squadron, 12th Cavalry—Fort Ringgold Texas

LT. COL. FREDERICK R. LAFFERTY, *Commanding*

Two basic phases exist in the training of a cavalry soldier. First, he must be taught the rudiments of his trade, namely to shoot, to ride, and to obey. The past two months have been devoted of necessity by the 2nd Squadron, 12th Cavalry, to this phase, inasmuch as over fifty per cent of the command has less than six months service. With the completion of its supplementary target season, the final period of which consisted of combat firing on the Boca Chica Range at Fort Brown, Texas, the Squadron can now enter the second phase, wherein the organization rather than the individual is the focal point of the training program. Consequently, the ensuing month will be devoted to readying the Squadron to take the field at a moment's notice, with particular stress being laid on road marches and tactical problems by squad, platoon and troop.

Present plans for the reception of our quota of Selective

Service enrollees call for their training as a unit so as not to interfere with the Squadron schedule.

Two periods of an hour's duration are devoted each week to the showing of training films prepared by the Signal Corps. These films cover a wide variety of subjects and are not confined merely to cavalry subjects, but include chemical defense, operation of various weapons used by other branches, signal communication, and infantry defensive and offensive maneuvers. Interest in some of these films has been so great as to warrant their being reshown in conjunction with the regular movie programs for the benefit of the entire post personnel.

Individual competition is now being conducted among officers of the squadron to determine platoon leaders for the Draper Trophy Contest which will be held on November 25, 1940. In charge is Lt. Col. Callie H. Palmer, Plans and Training Officer. Entrants include 1st Lts. John C. F. Tillson, III, Levin L. Lee, 2nd Lt. J. L. McCroskey, just recently joined following a three months' course at Fort Riley, and the following named reserve officers: 1st Lts. John G. Anderson, Clinton W. Crass, Robert L. Cole, Charles M. Pattie, Donald D. Barger, Robert A. Wright, and 2nd Lt. Carl L. Schweitzer.

Commanding officers of American and Mexican border army posts met at the military garrison at Reynosa, Mexico, on October 2, 1940, when General Pedro Lopez Tafoya honored Colonel Lafferty and members of his staff from Fort Ringgold with a review of the 24th Regimento de Cavalrie, Mexican Army, followed by a brilliant exhibition of horsemanship and jumping. A large number of civilians from both sides of the border attended the exhibition.

Repaying the courtesy extended at Reynosa, the Commanding Officer of Fort Ringgold and members of the garrison were hosts to General Tafoya and a group of Mexican army officers and government officials on November 5th when a review of the troops of the post was held in honor of the visitors. A horse show followed and the events of the afternoon were brought to a close with a reception held at the officers' club. These two recent meetings between the commanders of the American and Mexican sector commanders were the first held in a number of years and exemplify the good will that now exists between the two nations.

A recent innovation at officer's call is a daily report by one of the junior officers covering the contents of one of the numerous confidential bulletins issued on the war in Europe. This report serves a dual purpose for it not only enables all officers to receive the information without the necessity of having to read each individual bulletin but it also gives them an opportunity to gain experience in public speaking. Following each report all officers join in a discussion of the highlights of the bulletin.

Our regimental commander Colonel Arthur E. Wilbourn, has been a welcome visitor to the post during recent months and has done much to promote the good feeling existing between the two elements of his command. As a result of these visits our training is kept abreast of that of the Fort Brown units.

14th Cavalry (Less 1st Squadron and Band)—Fort Riley, Kansas

COLONEL A. H. WILSON, *Commanding*

By September 1st all elements of the Regiment stationed at Fort Riley had returned from the maneuver areas in Minnesota. During the period from September 1st to October 31st the Regiment has been participating in demonstrations for the students in the Cavalry School. Numerous members of the Regiment, both officers and enlisted men, are attending classes in the School and in the Post Specialist Schools. In addition to these schools intensive instruction is being conducted within the Regiment in order to prepare the enlisted personnel for duties as cadres in units to be activated within the 14th Cavalry and the newly contemplated 2d Cavalry Division of which the Regiment is a part. Cadres amounting to a total of one hundred ninety-four enlisted men will be required to initially form these new units from the 14th Cavalry, and with all of these new vacancies to be filled, with increased grades and ratings, those men who have been members of the Regiment and who have proven their worth will be justly rewarded.

It is interesting to note that during the past twelve months we have travelled considerable distances, having moved from Fort Des Moines, Iowa to Camp Robinson, Arkansas for intensive training November, 1939 to February, 1940; from Fort Des Moines, Iowa to Fort Riley, Kansas for a permanent change of station May, 1940 and from Fort Riley, Kansas, to the 4th Army Maneuvers in Minnesota June, 1940 to September, 1940. What the remaining months of 1940 hold for us of course is as yet undisclosed.

With cold weather approaching and overcoats becoming a necessity we are moving forward, come what may, and preparing for any eventualities, always looking toward perfection of the Cavalry Service.

The following officers have joined the Regiment since October 1st.

REGULAR ARMY

Second Lieutenant Robert W. Strong, Jr., 14th Cavalry.
Second Lieutenant James F. Kreitzer, 14th Cavalry.

RESERVE

Second Lieutenant Alfred B. Stansbury, Cav-Res. (1-EAD).

The following officer will join the Regiment in December.

Lieutenant Colonel Hans C. Minuth.

* * *

26th Cavalry (P.S.)—Fort Stotsenburg, P. I.

COLONEL ROBERT BLAINE, *Commanding*

The 26th Cavalry regrets the recent death of Brigadier General F. W. Honeycutt, former Post Commander.

A Graduation Ride, August 15, 1940, followed by a Regimental Horse Show on September 27th, climaxed the training of the last group of remounts. Captain H. J.

Fleeger, assisted by Captains William G. Bartlett, Robert E. Arnette, and 1st Lieutenants R. B. Praeger and C. R. Bowers, conducted the remount training. About 200 remounts arrived from the States in excellent condition and have now joined their organizations.

Under the "Maximum Attendance Training Day" program, the regiment conducted troop, squadron and regimental tactical problems and exercises during September with the ultimate aim of training both NCO's and men of the regiment to perform their duties efficiently under war conditions.

The Regimental Beach Firing at towed targets at OLONGAPO during October is scheduled as follows:

1st Sq. (less dets)—Sept. 30—Oct. 10th incl.
2nd Sq. (less dets)—Oct. 10th—Oct. 20th incl.
Prov. Sq. (less dets)—Oct. 20th—Oct. 31st incl.

A permanent camp, under Lieutenant Colonel Gyles Merrill, will be maintained at MAQUINAYA NAVAL RIFLE RANGE, OLONGAPO, during this period.

The regiment held a dismounted ceremony on the occasion of its 18th anniversary. Captain Hamilton H. Howze, Adjutant, 26th Cavalry (PS), read a message of greetings and well wishes from the Chief of Cavalry, Major General John K. Herr, and another message from the late General F. W. Honeycutt, which was left with Colonel Blaine.

The 26th Cavalry regrets the departure of Lieutenant Colonels W. E. Buchly, J. D. Hood, Captains P. A. Disney, H. H. Howze, H. M. Forde, and C. A. Lichirie who are sailing on the November Transport, and the regiment welcomes Second Lieutenants T. S. Jones and Lewis Brown, III, Cav-Res., who have been ordered to active duty for one year August 14, 1940 and September 24, 1940 respectively. The regiment also will welcome to the Philippines the officers who are due on the USAT *U. S. Grant,* October 31, 1940:

Lieutenant Colonel Frederick F. Duggan,
Captain Joseph A. Cleary,
Captain Paul M. Jones,
Captain T. F. Hurt, Jr.,
Captain Wm. S. Van Nostrand.

* * *

305th Cavalry, 62d Cavalry Division—Philadelphia, Pennsylvania

Colonel Vincent A. Carroll, *Commanding*

This year's training has been characterized by an increased determination, though a smaller attendance, as twenty-three of our most active officers are now on duty. We have had several excellent outside speakers at our Wednesday noon luncheons and at other times Colonel Chapin has presented his very interesting interpretations of the swiftly moving events of the war. Wednesday evenings at the armory are given over to riding, pistol practice and map problems.

308th Cavalry—Pittsburgh, Pennsylvania

Colonel George H. Cherrington, *Commanding*

October 16th, 1940, will long be remembered as Registration Day under the Selective Training and Service Act of 1940, which was the beginning of the first peace-time draft in the history of this country. To many young men of eligible age who stood in line at registration places, it was probably a day of regret that they had not taken advantage of former opportunities for military training and education. Many reserve officers who have allowed their commissions to lapse doubtless had similar feelings. To the officers of this Regiment who have given freely of their time and money and devoted vacation periods to taking active duty training, Registration Day was the justification of all their former sacrifices to improve their efficiency in military affairs. It is a matter of deep satisfaction to the group of officers who have heeded the advice of our commanding officer and continued their military training to the best of their ability.

It is with deep regret that we announce the death of Major James M. Graham who was drowned in Lake Erie when his sailboat overturned. Although the press of his law practice kept him from active participation in regimental affairs during the past year, we knew that his interest continued in all our activities. We extend our sincere sympathy to his family, and feel that we have lost a real friend and one of our most able officers.

Semi-weekly periods of mounted instruction are being continued as usual at the Regimental Training Center, and the indoor schedule of two conferences monthly is now in progress. A conflict occurred recently when four field artillery regiments were scheduled for a joint meeting in the conference room ordinarily used by our regiment on the second and fourth Mondays. In spite of the fact that the artillery group was considerably larger, due to the fact that four regiments were assembled, they very kindly canceled their announced subject and attended our conference. The questions asked indicated a genuine desire to learn more about the organization, equipment and tactics of cavalry. It is suggested that the time would be well spent in having occasional joint conferences in which greater understanding of the other arms and services could be obtained.

After several months without a Unit Instructor, we now have two. The Regiment recently welcomed to Pittsburg Major Alladin J. Hart and his family, who were formerly stationed at Fort Bliss, Texas. Major George W. Conner, our Regimental Executive, has been ordered to extended active duty and is serving at Headquarters as Assistant Unit Instructor.

Captain James P. Barr has received a radiogram ordering him to active duty at Honolulu, Hawaiian Islands. Lieutenant J. Roy Degenhardt is scheduled for a year's active duty with the Tenth Cavalry at Fort Leavenworth, Kansas.

Tommy Writes Again . . .

MY DAY . . by ELEANOR ROOSEVELT

"If the serious things of the world depress you too much, I recommend that you go out and buy a book called: *My Mother Is a Violent Woman,* by Tommy Wadelton. The gentleman may not be as young as his name or his style indicates, but he certainly has the gift of making a family group seem alive. He describes his character in a delightful way, always with the humorous side to the fore. I feel as tho I knew 'the violent woman' and knowing her, no one could help liking her."—Excerpt, October 22, 1940.

REMOUNTS

By Tommy Wadelton★

MY FATHER was re-mount officer at Fort Oglethorpe. Vacations I helped him train the horses—Or I thought I did anyhow.

An officer has to be pretty up and coming to make a good job on green horses. I was up and coming too—up at six o'clock which wasent so hot.

My father says as long as he can't be a troop commander he'd rather be re-mount officer then anything else and he thinks the three best jobs in the army are Troop Commander, Top Sergt and General.

The green horses came from Front Royal, and Fort Reno, which are re-mount depots. They are fresh untrained horses and when they arrive are put in quarrentine to keep other horses from catching horse disease if they have any. After three weeks they are taken to the ring and begin their training.

First they are put on some thing called a "Cavasson" which is a bridle with a padded nose band instead of a bit and has an iron ring attached to a longeing rope. A trainer holds the rope and talks to the horse so he can get used to the human voice. The man holding the rope stands still and the horse walks in a circle and after a while is given a slow trot. He is told what he is to do in a quiet voice so he wont be afraid. Some times horses are stubborn and gets the trainer mad and he cusses them out. The horse doesent care, he goes ahead doing what he likes anyhow, I guess a horse doesent understand profanity.

New horses are "longed" for one day. The next a saddle blanket is put on with a curcingle and he is longed again, after which he is saddled with crossed stirrups so they wont swing and scare him to death. After he gets so he dont mind the saddle the stirrups are put down and he is talked to and made to understand he has a job to do and he'd better be getting on with it and that man is his friend.

Some times horses are tough and must be taught who is boss around there. One of the re-mounts used to stand up on his hind legs and try to paw every one, he was a bad hombre but he dident get away with it and after he found out what was what, he got to be a pretty good horse. Fillis who wrote books on horse training said trainers should always wear high hats to protect their heads form horses with pawing habits but I think a detail of soldiers would look pretty funny in high hats.

After the horse gets used to the saddle with stirrups down, the trainer mounts but he doesent always stay mounted. The horses have something to say about that and will act smart and hump their backs and unless the trainer is a pretty quick thinker he dusts off the ground with the seat of his pants.

After the re-mount gets so he doesent mind the trainer on his back, he is taught to go forward. No backing or circling just forward slowly. Then he is made to trot a little without bit pressure. It's pretty much like a kid going to school. Before his lessons begin he has to learn to keep still, not want to go home all the time, and listen to the teacher. When I first started at school that was all I wanted to do. Go home. I used to watch my mother driving away in the car with Johnie my dog looking back whimpering at me and I'd feel awful hollow inside. I was too scared to talk to any one and sat around all day with my neck full of gulps until mother came for me again.

After the horse knows how to trot slowly and mind the

★Tommy is now fourteen years of age. His article is presented literally.

voice pretty good he is made to trot faster, make wide turns and change gaits.

The horses are kept in the ring at first so the men can have good control over them. When they have enough ring work they are started across country without formation. Green horses are used to running in herd and get scared if they are separated, and when a horse is scared he cant be trained or even controled, so they are ridden in gangs until they learn nothing is going to happen to them and have confidence in their rider. Then they are started at trot and gallop again across country. The horses have fun doing this and prance and throw their head around and act fresh.

After a while they are given logs to step over, and ditches to cross at a walk, and little jumps with the reins loose. Some times the horses play jokes on the men. They will do a little jump just dandy, until the trainer thinks they are O,K, at it, and the next time they go over the jump the horse will balk. The trainer will go over all right—but not the horse!—!!

My father told me a funny story about training horses in the Tenth Cavalry. One of the trainers was a black boy who wasent doing so good. The horse put up an argument and kicked and jumped and twisted until he got a foot caught in the stirrup. The black boy said, quote "Now you look-a-here hoss, if you's gwine to git on Ah's gwine to git offen" end quote.

After re-mounts have learned to walk, trot and gallop with a man up, and in open country he is ridden to fireing. Some one gets a long way off and shoots blank cartridges—That was one of my jobs—to do the shooting.

The trainer dismounts and acts as though nothing special was happening and smokes a cigarette and is nonchalant. If the horse is frightened anyhow he talks to it quietly and pets it, when it stops being frightened, the shooting is done closer and closer until the horse can see the guns going off without minding at all. After a while they get so used to it they let the trainer shoot from their backs. Sometimes no matter how good the trainer is the horse puts on a show. I know a funny story about being frightened at shots. Once there was a black boy who was scared of shooting. He was scared of everything I guess and did not want to get mixed up with white mans law nohow. Well he saw a man get shot and was hauled to court to tell what he knew about it. A lawyer said. quote "Rasus You sure you heard the shots that killed George Jones?" Rasus he said "Yassuh Ah sure am sure Ah heered dem shots" The lawyer clapped his hands fast and then slow and said "Now boy you tell me how the shots were fired. like this—with his hands slow —or like this with his hands fast. Rasus said "Like this boss" with his hands clapping faster then the lawyer. The lawyer said "Now boy you tell me where you were when you heard the first shot" "Ah was righ there with the corpses on fifty first street and tenth ave." "Where were you when the second shot was fired?" and Rasus said "Man Ah was jist a-passing Ginerals Grants tomb" end quote. Re-mounts dont run fast as that but they go pretty fast.

After the horses have gotten used to fireing and know the different gaits, they are taken to the pistol range and galloped while the trainer is shooting at targets with real ammunition, then taught fast gallop under fire, and to make shorter and shorter turns. When they learn this, about half their training is over. Its kind of like graduating from jr High an entering High for the next period of training.

They are taken to rough country for trotting and galloping and schooled over high jumps. The trainers then dismount as if they were to fight on foot, the horses are tied in groups and taught to move where and when they are needed. When they learn this they are given good high jumps, taught to carry rifles and drill under full pack.

Now they are ready to practice for graduation and made to do every part of their training over and over until they can do it without a hitch and almost without being told. When the big day come the re-mount knows what he is to do no matter what sort of job is given him. After the training is finished some of the horses become Officers chargers and some are given troop duty. What ever job they have they know it well after my father is through with them.

Some horses are plain tough and some nervous and each must be handled differently and it takes lots of patience and hard work. The men training re-mounts hate to part with them. after working together for ten weeks they get to be buddies. Some times a trainer will draw his own re-mount for troop duty and boy! are the man and horse glad!

My father says there is an awful lot of hooy written about horses. I read a story about Claudius, a Roman soldier, who caught a wild horse and trained it without bit or bridle. He fed him on raw meat and this made him so wild he went into battle with Claudius and bit his enemies. My father said a horse has no meat eating teeth so he guessed it must have been indigestion pains that made him wild—and where did he find a wild horse in the first place—because there wasent any wild horses around Rome that he ever heard tell of. he thought maybe the horse stopped for a drink at the Cafe de la Constatutions and Claudius caught him there.

When my father was away at Edgewood Arsenal learning to gas, the orderly we had was a drunk, and he tried to teach the horses to drink whiskey with him, and both of the horses kicked him good and hard. I guess they had more sence then the orderly.

I like horses. I dont ride very good because my mother had a bad crack up on a jump, and now she is upset about my father and I hunting or jumping. I like the bad hombres best I guess. They are not really bad, but just putting up a fight against things they dont understand. One of my father's horse books has a story that makes him hoot. He says it has as much sence as a story about

Johnie, our dog, doing a bubble dance. It is about an Arab horse named Sayyid. His boss was Langdon, an Englishman who had been taken prisoner by the savage Wahhabis tribe, Langdon was tied up with rope and put in the middle of a circle with the Wahhabis on the outside of him, so he couldent be rescued. In the dead of night Langdon felt a soft nose on his face and there was Sayyid. He took Langdon up by the rope around his middle and tippy-toed, like a dark shadow among the sleeping Wahhabis. When he got out side the camp, quote, "He broke into a swinging trot" end quote, keeping his head high so Langdons legs wouldent drag and get hurt. All night Sayyid carried Langdon just putting him down when he had to rest his teeth. On and on he kept though Langdons weight was making his feet stagger and his breath bad. In the morning friendly Arabs camped on the dessert saw them coming and thought it was a dieing horse carrying a dead man. Langdon did not die but Sayyid did and Langdon was never happy again because he missed his horse. My father says it's wacky enough to be classic.

One of the things we like is an Englishman talking about his horses he say's, quote "I've bred all sorts of horses, They'r me fancy. They'r vittles and drink to me. House and home. wife and children. tobacco and sleep, readin, ritin, and 'rithemetic" end quote.

I think that's swell. My father is like that except he has my mother and me.

* * * *

Hidden Talents*

By Gene Lindberg

No man can tell what the future holds
For these youngsters of sagebrush land;
They may wheel and dash on the polo fields
At the touch of a practiced hand.

They may, some day, make the caissons roll
On the fields of artillery;
They may fall in line with bugles call
As they serve with the cavalry.

Just bush league colts in the sagebrush now—
But who knows what the years will bring?
Sleek hunters, jumpers and gaited mounts
That shine in the tanbark ring?

A free land this, where both horse and man
Can create opportunity.
They need not be what their fathers were;
They'll be what they're fit to be.

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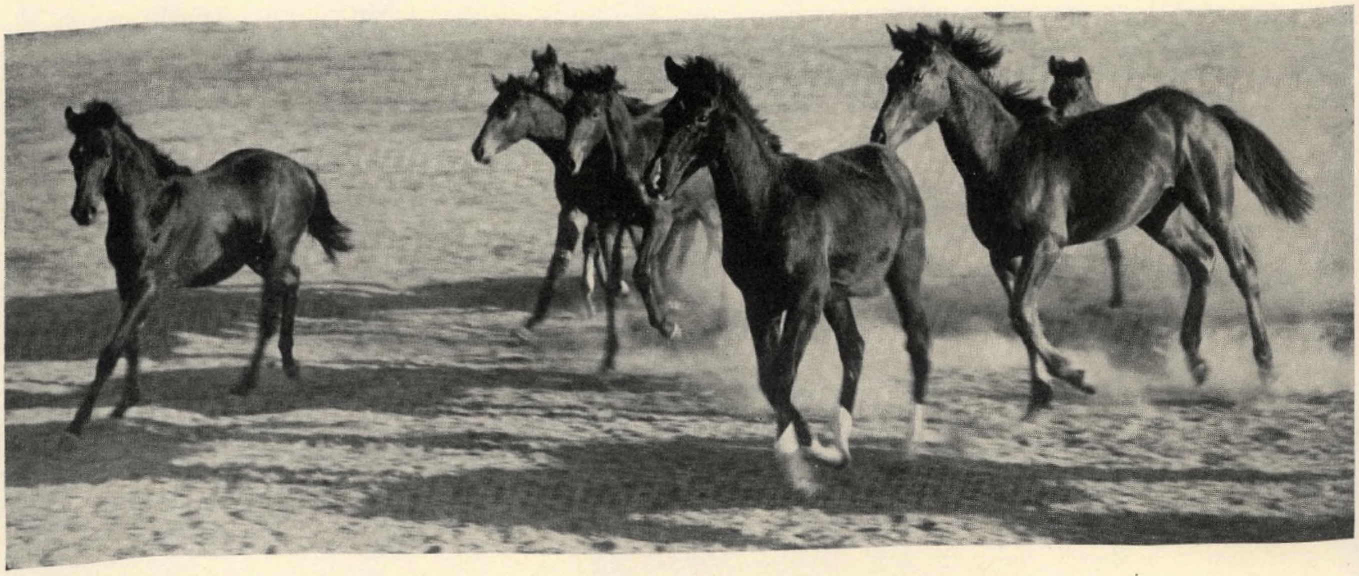
*From *The Denver Post.*



Horse Feathers

Lieutenant: "Are you a careful driver of that motorcycle and side-car?"

Driver: "Yes, Sir, I sure am. Every accident I've had so far has been the other fellow's fault."

* * *

Lt. Doctor: "H'mm, high blood pressure! The best thing you can do is to give up cigarettes, liquor, and wo—"

Corporal: "Please stop, Sir. What's the *next* best thing?"

* * *

There is a movement to make army hospitals seem more homelike. That's easy! Just have eight or ten radios and three or four electric pianos on every floor, six or seven crying babies, a swearing janitor, and a carpenter shop in the garret!

* * *

Col. A: ". . . And what's your baby's name, Hannah?"

Colored Maid: "Hallud, Sir. We done named him from the Bible."

Col. A: "Hallud? I never heard that before."

Colored Maid: "Oh, yassah. Ain't you never read, 'Hallud be thy name'?"

* * *

"Cheerfulness is the oil that makes the military wheels revolve without friction."

* * *

On the barracks' wall at Delhi, India, this inscription will be found: 'When war is on and strife is nigh, God and the soldier is all the cry; when war is o'er and peace is cited, God and the soldier are quickly slighted."

* * *

Lt. Y: "But why are you going to *swear off?*"

Lt. Z: "Because I'm sick and tired of waking up every morning, sick and tired."

* * *

"Hey, Cook, there's a piece of rubber tire in my hash!"

"Well, waddya expect, soldier? This is a mechanized outfit, ain't it?"

* * *

Knowledge is power, but it won't run a tank without gasoline.

* * *

A Dirty Plug

A small sign over a small town garage: "Automobiles repaired. Scout Cars fixed."

Efficiency Report

1st Ind: "This officer should go far."

2nd Ind: "The farther the better."

3rd Ind: "He should start at once."

* * *

What Would You Do?

Captain: "Now, Lieutenant, suppose you found your platoon completely cut off from the rest of the troop, your animals killed, inaccessible mountains around you, a raging torrent before you, ammunition gone, and entirely surrounded by the enemy, WHAT WOULD YOU DO?"

Lieutenant: "Gosh, Sir, you ARE a pessimist."

* * *

Sergeant: "And now that you are in the army, young man, what would you like to be?"

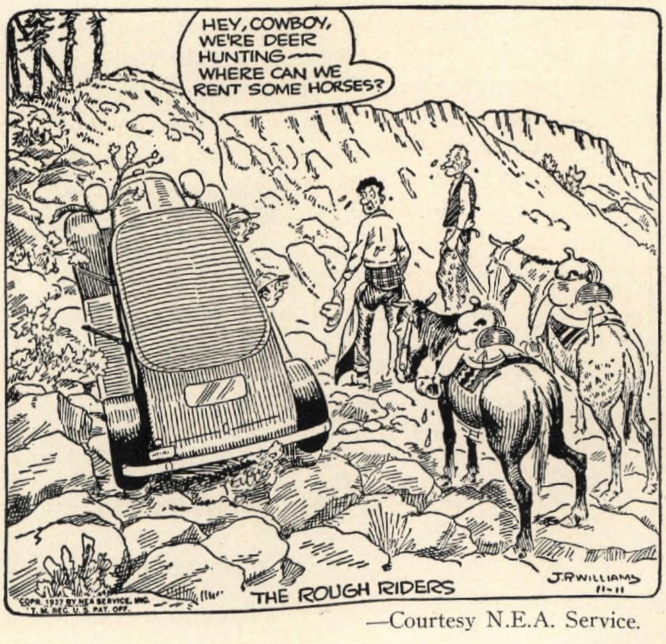
Trainee: "An ex-serviceman."

* * *

A Soldier's Ambition

I want to be something more than a man;
I want to be a soldier, the best that I can.
I want to be a soldier so brave and true
To fight for my country—the red, white and blue.
I don't mean the kind that seeks after fame,
But just a real soldier with an honorable name.

—Pvt. E. W. Abbott, Fort Clark, Texas.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THE ROUGH RIDERS
J.R.WILLIAMS 11-11
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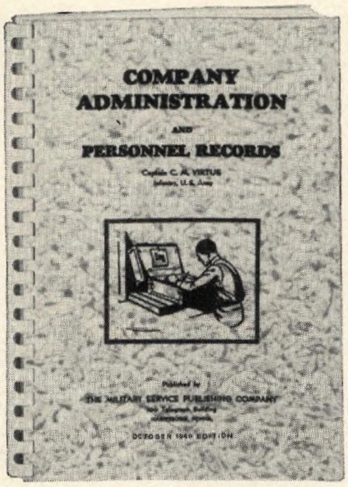

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The Cavalry Journal

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Book Reviews

Numerous war books, daily, are being thrust upon a busy and unsuspecting public, eager for critical military information. Of these, very few, in our opinion, are worth the time and effort required to peruse them; nor the financial expenditure necessary to obtain them. Usually, a consideration of the author's background and subject matter will immediately determine the value of the exposition; particularly for members of our military establishment.

This column, therefore, is not a space-filler. When a book is recommended to our readers, it is after careful unbiased consideration of its intrinsic value, scope of broadening influence or preëminence within its subject field. Occasionally, attention is invited to a book of highly controversial character, only as a matter of interest to establish its existence. *F. S. J.*

* * *

BATTLE SHIELD OF THE REPUBLIC. By Major Malcolm Wheeler-Nicholson. The Macmillan Company. New York. $1.50.

Major Wheeler-Nicholson, squadron and battalion commander during the World War I era, again points out the defects in our present military system—this time, in a well written volume. "These basic faults," writes the major, "would make it difficult for the United States Army to win a war against a first-class military power (meaning Germany). The army is still unable to supply officers who can be depended upon to lead troops capably in battle." etc., etc., etc!

Major Wheeler-Nicholson's reform panacea for all of our army's ills is most illuminating.

* * *

DE GAULLE AND THE COMING INVASION OF GERMANY. By James Marlow. E. P. Dutton & Co., 95 pages. $1.00.

A biographical sketch written prior to General de Gaulle's expedition to Africa.

"The fallacy of preparedness for defense alone is here brilliantly exploded by General de Gaulle whose ideas of mechanized and motorized warfare, scorned by the French General Staff, were seized upon and used against his own country by Hitler's Germany. A powerful brief for carrying the present war, once technical superiority is achieved, into the heart of Nazidom. A fighting book for all Americans who want no false Maginot Line of defense between democracy and dictatorship."

"21 TO 35"—WHAT THE DRAFT AND ARMY TRAINING MEAN TO YOU. By William H. Baumer, Jr. and Sidney F. Giffin. Prentice-Hall, New York. 143 pages. $1.00.

This is not an official government publication although much of the data has been taken directly from official government pamphlets. The authors, Captains Baumer and Giffin, are instructors at the United States Military Academy at West Point, New York. The book, obviously, is addressed to those not already in the Army of the United States, but who may be selected for service. It answers such timely questions as: Will you be selected? If you are deferred now, under what circumstances may you be called later? What will happen to your job if you are called? How will you be inducted into the army? Exactly what will be your training in the army? What are your opportunities in the army? These and many other questions are covered briefly and authoritatively. Small charts clarify the text. It is an excellent orientation for everyone interested in Selective Service and how it effects the selectee—about which, *all of us should be conversant.*

* * *

HOW TO BE AN ARMY OFFICER. By William H. Baumer, Jr. Robert M. McBride & Co. New York. 238 pages. Illustrated. $1.75.

A co-author of "21 and 35," Captain Baumer in this volume describes in an interesting and entertaining manner the different ways in which one may become a commissioned officer in the Army—West Point, Randolph Field, Thomason Act Officer, R.O.T.C., etc.; and the academic and physical requirements which must be met. A full chapter is given to the Reserve Officers' Corps.

This book has an immediate and practical value for every young American who is aware of the part he can play in the defense of his country and who would like to know how to prepare himself to become an army officer.

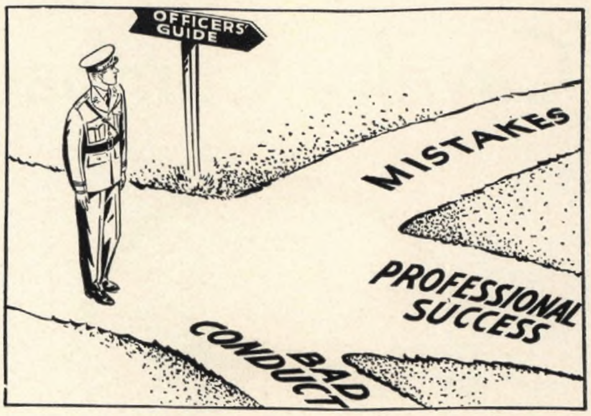
* * *

WHERE THEY HAVE TROD. By Lieutenant Colonel R. Ernest Dupuy, Field Artillery, U.S.A. Frederick A. Stokes Co., New York. 424 pages. Illustrated. $3.00.

This is a gift book of permanent value in every American home library. It is the story of the development and influence of the U. S. Military Academy; the West Point ideal of Duty, Honor, and Country—transmitted through its graduates to help shape and preserve this nation.

There are 31 illustrations chiefly from old prints and drawings, a concise appendix, full bibliography and index.

Colonel Dupuy, a former newspaperman, author of *Perish by the Sword, World in Arms,* and joint author with Major George Fielding Eliot of *If War Comes,* throws his talents unreservedly into making this volume a literary gem—one which the service, and every West Pointer in particular, should cherish.



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BLITZKRIEG. By S. L. A. Marshall. William Morrow & Co., Inc. New York. 1940. 188 pages. Maps. $2.00.

This is one of the most sagaciously sane basic analysis of this subject—its history, strategy, economics, and the challenge to America—which to date has appeared in commercial print.

Mr. Marshall, a nationally known feature writer, foreign correspondent, and military critic, scorns the wait-until-America-is-invaded school of thought. He reminds us that there are worse things than war; *one of them is defeat.*

* * *

GREEN ENTRY. By F. Ruth Howard. William Morrow & Co. New York. 1940. 274 pages. $2.50.

When you have grown tired of the mere sound or sight of the word "Blitzkrieg," and seek mental relaxation, you will find this joyously happy book refreshingly different. *Green Entry,* with the background of a horse-show circuit in California, is a MUST novel.

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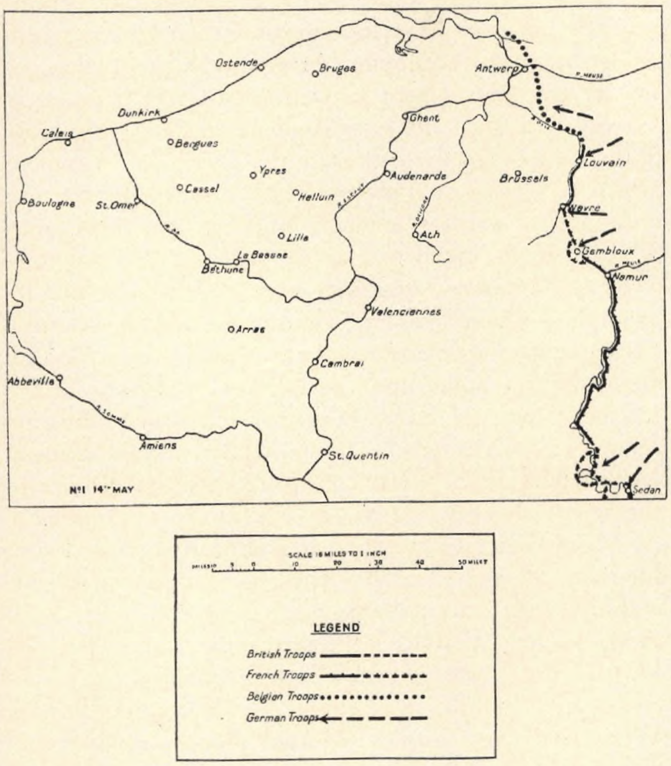
Foreign Reviews

CARDED

British Withdrawal From France*

IN spite of German claims to the contrary, the British Expeditionary Force has not been beaten in the field. It could have continued to offer prolonged resistance on its own front; but it could not prevent enemy penetration on other parts of the front held by the Belgian and French armies. Owing to these German incursions it was compelled to withdraw in order to avoid encirclement. These facts are made abundantly clear by details which have lately become known of the operations in Belgium and Northern France during the period 10th May—2nd June, 1940.

These activities fall naturally into three main phases.



The First Phase—10th to 15th May

On the 10th May, Belgium was invaded without warning by the German armed forces and appealed to Great Britain and France for military aid.

The B.E.F., which was already in France, was not an independent formation but had been placed by the British Government under the orders of the French High Command. In conformity with this decision, General Lord Gort, C.-in-C., received his orders for the ensuing operations through General Georges, Commander of the French North-Eastern front. Plans had been prepared by General Georges for an advance into Belgium in the event of such an appeal being made, but owing to the short-sighted adherence of the Belgian Government to their strict interpretation of "neutrality" it had not been possible to coördinate these plans by detailed arrangements with the Belgian General Staff.

However, no time was lost and on the same day, the British and French Armies marched into Belgium where they were enthusiastically received by the civilian population and by the Belgian army. By the same evening, British mechanized troops had taken up a position on the line of the River Dyle, East of Brussels, from Louvain to Wavre. These forces included the 12th Royal Lancers (mechanized), whose exploits during the next three weeks most worthily upheld the splendid traditions of the regiment and of the mounted arm.

The position on the Dyle was occupied by the I Corps (1st, 2nd and 48th Divisions) and by the II Corps (3rd and 4th Divisions) and put in a state of defense. The disposition of Divisions from right to left ran as follows: 2nd, 1st, 4th, 3rd, flank Divisions establishing touch with the French First Army on the right and the Belgian Army on the left; the 48th Division was held in reserve. The Army Tank Brigade moved by rail to the Forest of Soignies. The 5th Division moved by M.T. to an area South-West of Brussels in support of the I Corps, while the 50th Division reached the line of the river Dendre, West of Brussels, where all crossings were prepared for demolition. The III Corps occupied the line of the river Escaut in support, with the 44th Division in the North and the 42nd Division in the South.

During this period, part of the 23rd Division was disposed to deal with parachutist activities on various unoccupied aerodromes. Elements of the 12th and 46th Divisions, the infantry of which were on a low scale of armament, were brought up and one infantry brigade of the 46th Division took over road control and anti-sabotage duties on the roads and in the area between the Dendre and the Escaut.

So far as the B.E.F. was concerned, therefore, the operations had up to now proceeded smoothly and according to plan, and enemy attacks on the line Louvain-Wavre were repulsed.

Then came the failure of the Belgian Army to hold or destroy the Maastricht bridges. This enabled the enemy to make full use of the Aachen-Maastricht railway system in their incursion towards the West. The air situa-

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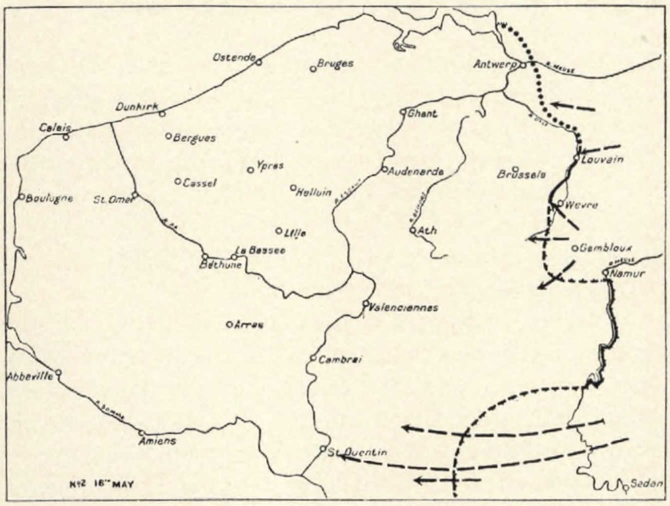
*From *The Journal of the Royal United Service Institution*, August, 1940.

tion, though difficult, was not critical; more fighters from home had been put at the disposal of the Air Component; and night bombers were available, although some trouble was experienced in coördinating their tasks with the urgent requirements of the French High Command. Taken as a whole, however, the situation on the front of the B.E.F. was still favorable.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Bethune
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Abbeville
Amiens
St. Quentin
Sedan
Nº2 16th MAY

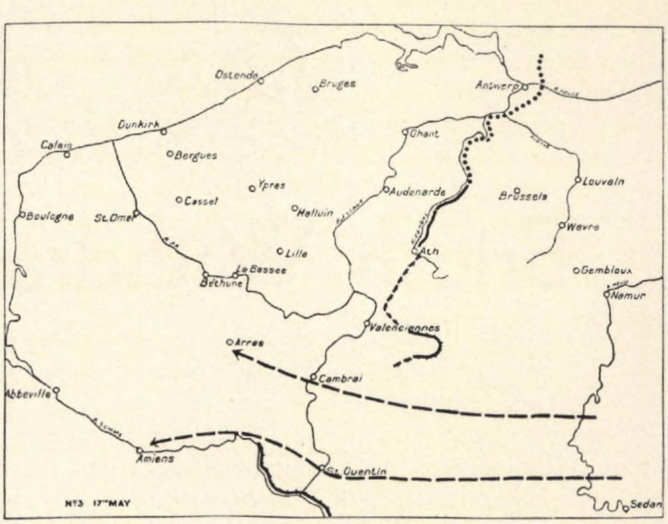
THE SECOND PHASE—16TH TO 26TH MAY

On 16th May, news of a German break-through on the front of the French Ninth Army, South of Namur, was confirmed at G.H.Q. This operation was effected with armored forces, supported by troops carried in M.T. or mounted on motorcycles and its success seems to have exceeded the highest German expectations. By the evening, enemy armored forces had penetrated nearly forty miles and had slipped through the field defenses which prolonged the Maginot Line to the North along the Franco-Belgian frontier.

This irruption, combined with the dissolution of the French Ninth Army, left the flank of the French First Army, operating North of the Sambre, in a dangerously exposed position. An immediate retreat was inevitable, and the B.E.F. had to conform to the general withdrawal. The I and II Corps retired by stages to the line of the Dendre, where the 50th Division was still in position. The 48th Division threw out a defensive flank to the South; attempts by a German armored formation to cut in behind the I Corps in the neighborhood of Hal were repulsed. The I Armored Reconnaissance Brigade arrived near Lille.

The situation in Northern France continued to deteriorate rapidly, and by the evening of 17th May, German armored troops were South of the Forest of Mormal, and by the evening of the 18th, they were approaching Peronne only some thirty miles East of Amiens.

The withdrawal of the allied forces in Belgium was persisted in and by the 19th the B.E.F. were in occupation of the line of the Escaut, where the position was held from right to left as follows: I Corps, with 48th and 42nd Divisions up (2nd Division in reserve); II Corps with 1st and 3rd Divisions up (50th Division in reserve); III Corps, with 4th and 44th Divisions up (5th Division in G.H.Q. reserve); Army Tank Brigade in G.H.Q. reserve South of Lille.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Sedan
Nº3 17th MAY

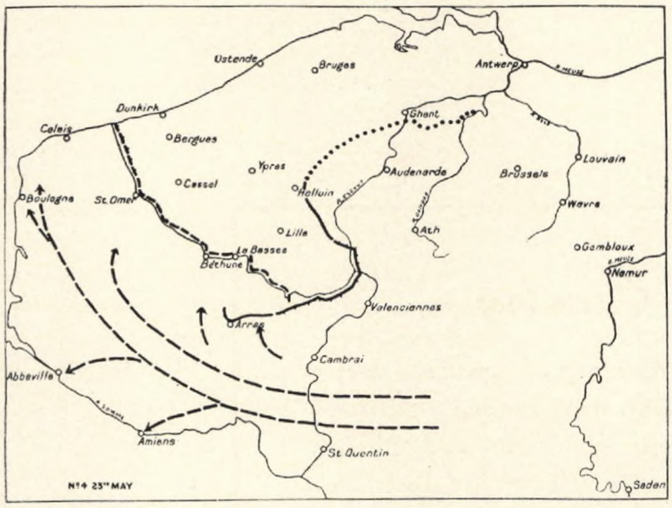
By 20th May, enemy armored formations had reached Doullens and were heading for Abbeville. It became urgently necessary, therefore, to strengthen the right flank of the B.E.F. by occupying Arras and by organizing the line of the Canal from Gravelines-St.Omer-Bethune to Carvin, with such troops as could be made rapidly available. These chiefly consisted of Territorial battalions which had come to France for labor duties in the rear areas and of various artillery, engineer and other units which had not taken part in the advance into Belgium. Various composite formations were hastily built up; for example "Petreforce" (Commander, Major-General Petre), including elements of the 23rd Division, Welch Guards, West Yorks, and a squadron of tanks was formed for the defence of Arras. Another composite formation known as "Macforce" (Commander, Major-General Mason Macfarlane) was constituted for the defence of the Scarpe about St. Amand. "Frankforce" (Commander, Major-General Franklyn) including the 5th and 50th Divisions (less one brigade) the 1st Army Tank Brigade and the 12th Lancers was allotted to the Vimy area. And, lastly, "Polforce" (Commander, Major-General H. O. Curtis) was given the task of holding the St. Pol area against infiltration of enemy armored units from the West. All these improvised formations played a vital part in holding up the enemy and in gaining time for the eventual withdrawal of the B.E.F. to Dunkirk.

It was now learnt that more enemy armored divisions had pierced the Cambrai-Peronne gap in the zone of the French Armies, and in rapid succession threatened Amiens, Abbeville, Boulogne, and Calais. The roads and railways upon which the B.E.F. depended for communication with its bases were therefore cut.

In an endeavor to restore the situation General Weygand—formerly C.-in-C. the French Forces in Syria, who had just taken over supreme command of the allied forces in the West, prepared a plan for closing the Cambrai-

Peronne gap by a simultaneous attack northwards from the Somme, and southwards from the neighborhood of Douai. This attack was to be launched on 21st May, and on that date "Frankforce," assisted by a French light mechanized division from the French Seventh Army on its right, attacked southwards on either side of Arras and made considerable progress. The French Corps on the left which was to have coöperated did not attack until two days later. The French offensive northwards from the Somme never materialized.

The situation which ensued from 22nd to 25th May was one of considerable complexity. During this time fighting was in progress over wide areas between our composite formations and enemy armored and motorized troops. The I, II and III Corps withdrew from the Escaut position, which they had held firmly against all attacks since 19th May, to the zone of the Frontier defenses. These were occupied by the I Corps (1st and 42nd Divisions) on the right and the II Corps (3rd and 4th Divisions) on the left.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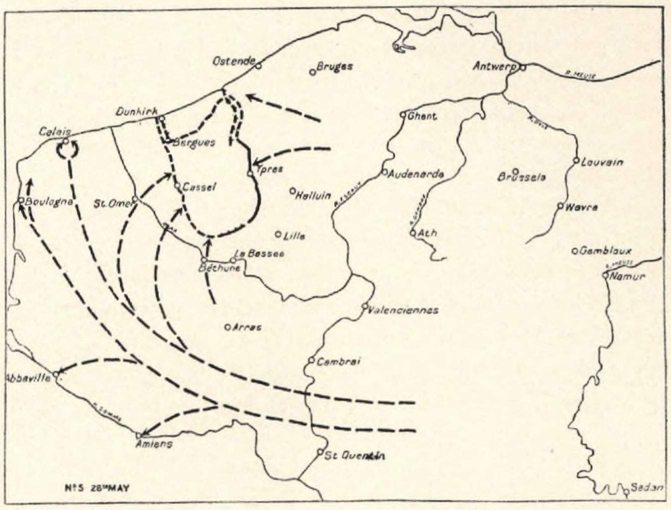
Nº4 25th MAY

On 23rd May, valuable assistance was received from the allied troops, the French relieving the 2nd and 48th Divisions, while the Belgians took over from the 44th Division. The purpose of these reliefs was to build up a British reserve in accordance with the wishes of the allied High Command for a counterattack to close the gap to the South.

The situation, however, deteriorated still further. German armored formations attacked Bethune and, after meeting with a repulse at that point, swerved eastwards towards Carvin. The positions of the 5th and 50th Divisions on the Scarpe became untenable; Arras had to be evacuated.

From the air point of view, too, the situation had become extremely difficult. Most of the allied landing grounds in the North-East of France had been overrun by the Germans and coöperation with the R.A.F., in default of personal liaison, had to be arranged by radio with England.

In these circumstances the projected counter stroke to the South grew more and more impracticable. On 25th May, therefore, the plan was definitely abandoned, the 5th Division being ordered to take post on the Ypres-Comines Canal. This operation marked the conclusion of the second phase.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Nº5 26th MAY

THE THIRD PHASE—26TH TO 28TH MAY

During the third phase the B.E.F., after evacuating Arras and the Frontier defenses, withdrew by stages to the Dunkirk-Nieuport perimeter.

On 26th May, all those composite formations which have already been referred to were abolished and the units composing them were absorbed in the new defense zone. The general line of the Western flank ran as follows: Bergues-Wormhout-Cassel-Hazebrouck-Lille. This was held by: 46th Division, 2nd Division, 44th Division, 48th Division. The 50th Division was in G.H.Q. reserve South-West of Lille. The Belgian Army was requested to fall back to the line of the Ypres Canal. The East flank of the defensive zone was held by the 5th Division, one brigade of the 48th Division, II Corps, I Corps.

During the day, the enemy intensified his pressure against the Western flank and it became plain that a general withdrawal to the coast could no longer be postponed with safety.

On the night 26th-27th May the main bodies of the I and II Corps started to evacuate their positions, which were taken over by rear-guards. "Adamforce" (Commander, Lieut.-General Sir Ronald Adam) was formed to take command of all troops arriving in the Dunkirk-Nieuport perimeter and to prepare for their evacuation by sea. The War Office was requested to arrange for the necessary shipping and for ammunition, rations and water to be dumped on the beaches. From now until arrival within the perimeter the troops had to be put on half rations.

Information reached G.H.Q. early on 27th May that the Belgian Commander-in-Chief had requested an armistice. The situation on the Eastern flank of the B.E.F. thus became highly critical. The 3rd Division was moved up North of Ypres to protect the left flank of the 50th Division. Later, the C.-in-C. received a telegram from the War Office agreeing to the suggested withdrawal and instructing him that his primary task was to insure the safety of the troops under his command.

The retirement continued during the night 27th-28th May, and next night withdrawal of main bodies to the Dunkirk-Nieuport perimeter began. Rearguards fell back to the line of the Lys, North-West of Lille. A French Corps (Commander, General de la Laurencie) and portions of certain light motorized divisions conformed to the movement. The defensive perimeter was occupied in a methodical manner on 29th May and was held as follows: I Corps, West of the frontier in touch with French troops at Bergues; II Corps, East of the frontier.

Plans for evacuation by sea worked as smoothly as could be expected in such difficult circumstances. During the night 29th-30th May, the British Government instructed the C.-in-C. to leave as soon as his force had been reduced to three Divisions. The I Corps (1st, 42nd and 50th Divisions) was selected to act as rearguard and to continue evacuation at the same rate as the French Army. The embarkation of the II Corps continued throughout the night, 31st May-1st June. The I Corps took over the defenses at 6 P.M. on 31st May, at which hour Major-General Alexander assumed command of the troops left in and about Dunkirk. The intention had been to embark the whole of the I Corps during the night 1st-2nd June but, as this turned out to be impracticable, a force of about one brigade, including General Alexander, held on until the following night, when it was finally evacuated to England.

It will be realized, therefore, the withdrawal to Dunkirk was forced upon the B.E.F. for strategical reasons the origin of which must be sought in sectors other than those for which they were responsible. Tactically our troops mastered the enemy whenever they encountered him in the field.

European Cavalry

As this issue goes to press, news reports indicate that in Italy's invasion of Greece, *mechanization proved a failure.*

Unlike the open rolling terrain of Poland and the Low Countries, the tanks and other motor vehicles in Greece were helpless in the mountain vastness and rain flooded areas near the frontier—presenting a special situation favorable to horse cavalry and the pack mule—apparently not anticipated by Italy.

It is reported also that Greek horse cavalry, supported by mountain artillery and infantry, outflanked the Italians, cutting their lines of communication.

This is further proof that the so-called popular conception, that the horse is obsolete in modern war, is *a fallacy!*

Assignment of Regular Army Cavalry Officers

(As of November 10, 1940, Arranged Alphabetically)

Office of the Chief of Cavalry, Washington, D. C.

Major General
John K. Herr

Colonel
Karl S. Bradford

Lieutenant Colonels
James T. Duke
Fenton S. Jacobs
Charles S. Kilburn
George I. Smith
Edwin M. Sumner

Major
Francis P. Tompkins

Captains
John H. Claybrook
Robert L. Howze
Theodore S. Riggs

Commandant, Staff and Faculty, The Cavalry School, Fort Riley, Kansas

Brigadier General
Robert C. Rodgers

Colonel
Dorsey R. Rodney

Lieutenant Colonels
William B. Bradford
Harold E. Eastwood
Harold C. Fellows
Edward M. Fickett
John C. MacDonald
William H. W. Reinburg
Vennard Wilson

Majors
John L. Ballantyne
Frank O. Dewey
Paul Mac K. Martin
Donald H. Nelson
Carl D. Silverthorne
Lawrence G. Smith
John H. Stodter
Earl F. Thomson
Thomas T. Thornburg
Wesley W. Yale

Captains
Logan C. Berry
George W. Busbey
Henry T. Cherry, Jr.
James B. Corbett
Raymond W. Curtis
John W. Darrah, Jr.
Charles G. Dodge
William B. Fraser
Henri A. Luebbermann
Carl W. A. Raguse
Jesse B. Wells
Henry R. Westphalinger
John P. Willey

Cavalry Board, Fort Riley, Kansas

Lieutenant Colonel
John T. Pierce

Majors
Andrew E. Forsyth
Henry C. Hine, Jr.

Captain
Charles H. Valentine

Post Headquarters, Cavalry School, Fort Riley, Kansas

Lieutenant Colonels
Lucien S. S. Berry
Roy E. Blount
James N. Caperton
Gustav B. Guenther
Darrow M. Enoher
Cyrus J. Wilder

Majors
Edwin P. Crandell
Virgil F. Shaw

Staff and Faculty, The Army War College, Washington, D. C.

Lieutenant Colonels
John W. McDonald
Earnest A. Williams

Staff and Faculty, Command and General Staff School, Fort Leavenworth, Kansas

Colonel
Kinzie B. Edmunds

Lieutenant Colonels
Paul R. Davison
Charles F. Houghton
John E. Selby
Arthur P. Thayer
John B. Thompson

Major
Erle F. Cress

Staff and Faculty, The Infantry School, Fort Benning, Georgia

Lieutenant Colonel
Thomas W. Herren

United States Military Academy, West Point, New York

Lieutenant Colonel
Joseph M. Tully

Captains
Frederic W. Barnes
J. Paul Breden
Frank H. Britton
Robert W. Fuller 3rd
W. Hamilton Hunter
John L. Inskeep
George R. Mather
Joseph H. O'Malley
Loren D. Pegg
William J. Reardon
Karl L. Scherer
Ronald M. Shaw
John K. Waters
William H. Wood
William H. S. Wright

War Department General Staff, Washington, D. C.

Colonel
William M. Grimes

Lieutenant Colonels
Frank A. Allen, Jr.
James K. Cockrell
Walton W. Cox
Calvin DeWitt, Jr.
Herbert L. Earnest
William K. Harrison, Jr.
Rufus S. Ramey
William E. Shipp
Raymond E. S. Williamson

Majors
Clovis E. Byers
Henry I. Hodes
Willard A. Holbrook, Jr.
Verne D. Mudge
George A. Rehm
Paul McD. Robinett
Ira P. Swift
James H. Walker

General Staff with Troops

Colonels
Arthur B. Conard, Chicago, Illinois
George Dillman, Chief of Staff, Eighth Corps Area, Fort Sam Houston, Texas
Kenna G. Easthan, Quarry Heights, Canal Zone
Arthur W. Holderness, Manila, P. I.
John C. Pegram, Omaha, Nebraska
Donald A. Robinson, Fort Lewis, Washington
Cuthbert P. Stearns, Fort Snelling, Minnesota
John M. Thompson, Fourth Corps Area, Atlanta, Georgia

Lieutenant Colonels
Harry H. Baird, Fort Hayes, Columbus, Ohio
Wilson T. Bals, Omaha, Nebraska
Vance W. Batchelor, Fort Bliss, Texas
Thoburn K. Brown, Fort Bliss, Texas
William C. Chase, Fort Sam Houston, Texas
Gilbert X. Cheves, Washington, D. C.
Rinaldo L. Coe, Fort Ord, California
Beverley H. Coiner, Fort Sam Houston, Texas
Samuel V. Constant, Governors Island, New York
Richard W. Cooksey, Fort Shafter, T. H.
Willis D. Crittenberger, Fort Knox, Kentucky
Cornelius M. Daly, Fort Knox, Kentucky
John C. Daly, Fort Hayes, Columbus, Ohio
John F. Davis, Governors Island, New York
Carl J. Dockler, Fort Bragg, North Carolina
Henry L. Flynn, Baltimore, Maryland
Charles H. Gerhardt, Washington, D. C.
Robert W. Grow, Fort Benning, Georgia
John A. Hettinger, Fort Jackson, South Carolina
Geoffrey Keys, Fort Benning, Georgia
Ray T. Maddocks, Fort Bliss, Texas
Harold C. Mandell, Fort Hamilton, New York
George Millholland, Baltimore, Maryland
John C. Mullenix, First Corps Area, Boston, Massachusetts
Herbert A. Myers, Atlanta, Georgia
Thomas H. Rees, Jr., Presidio of Monterey, California
James S. Rodwell, Fort Benning, Georgia
A. Worrell Roffe, Fort Sam Houston, Texas
James C. Short, Fort Sam Houston, Texas
James Van V. Shufelt, Atlanta, Georgia
Lester A. Sprinkle, Fort Snelling, Minnesota
Otto B. Trigg, Governors Island, New York
Charles H. Unger, Fort Knox, Kentucky

Majors
William L. Barringer, Fort Knox, Kentucky
Leslie D. Carter, Quarry Heights, Canal Cone
William S. Conrow, Presidio of San Francisco, California
Charles S. Miller, Omaha, Nebraska
Gilman C. Mudgett, Columbia, South Carolina
Charles H. Noble, Fort Bliss, Texas
Redding F. Perry, Fort Benning, Georgia
John W. Wofford, Fort Benjamin Harrison, Indiana

Duty with General Staff

Lieutenant Colonels
Ernest N. Harmon, Fort Knox, Kentucky
Royden Williamson, Fort Sam Houston, Texas

Duty with Headquarters Corps Area

Colonels
Robert M. Cheney, Headquarters, Ninth Corps Area, San Francisco, California
Harley C. Dagley, Headquarters, Fifth Corps Area, Columbus, Ohio
Edward A. Keyes, Headquarters, Eighth Corps Area, Fort Sam Houston, Texas
Clarence Lininger, Headquarters, Second Corps Area, Governors Island, New York
Henry R. Richmond, Headquarters, Fourth Corps Area, Atlanta, Georgia

Major
Howard A. Boone, Headquarters, Seventh Corps Area Omaha, Nebraska

Captain
Cary B. Hutchinson, Second Corps Area, Governors Island, New York

Aides

Lieutenant Colonels
James W. Barnett, Presidio of San Francisco, California
Hugh J. Fitzgerald, Fort Benning, Georgia
Eugene A. Regnier, Washington, D. C.
Carl J. Rohsenberger, Fort Hayes, Columbus, Ohio

Majors
Donald H. Galloway, Fort Wadsworth, Rosebank, Staten Island, N. Y.
Eugene L. Harrison, Washington, D. C.
Walter F. Jennings, Fort Riley, Kansas
Thomas J. Randolph, Sixth Corps Area, Chicago, Illinois
Willard G. Wyman, Fort Lewis, Washington

Captains
Joseph E. Bastion, Jr., Quarry Heights, Canal Zone
Robert G. Fergusson, Presidio of San Francisco, California
John F. Franklin, Jr., New Federal Building, Omaha, Nebraska
George R. Grunert, Manila, P. I.
Joseph F. Haskell, Fort Bliss, Texas
Francis J. Murdoch, Jr., Fort Clark, Texas
John R. Pugh, Manila, P. I.
John H. Stadler, Jr., Manila, P. I.

Military Attaches

Lieutenant Colonels
Mark A. Devine, Jr., Buenos Aires, Argentina
Norman E. Fiske, Rome, Italy
Samuel A. Greenwell, London, England
George E. Huthsteiner, Helsinki, Finland
Carl A. Strong, Bogota, Colombia
John A. Weeks, Montevideo, Uruguay

Majors
Joseph K. Baker, Athens, Greece
Cornelius C. Jadwin, Rome, Italy
Hugh B. Waddell, Stockholm, Sweden

Captains
Clarence W. Bennett, La Paz, Bolivia
Joseph A. Michela, Moscow, U.S.S.R.
Egon R. Tausch, Mexico City, Mexico

Miscellaneous Duty

Language Students
Captain C. Stanton Babcock, American Embassy, Tokyo, Japan
Captain Edwin M. Cahill, American Embassy, Peiping, China
Captain Karl T. Gould, American Embassy, Tokyo, Japan
Captain Dana W. Johnston, Jr., American Embassy, Tokyo, Japan
Captain Edward J. McNally, American Embassy, Peiping, China
Captain Frank D. Merrill, American Embassy, Tokyo, Japan

Disciplinary Barracks, Fort Leavenworth, Kansas
Lieutenant Colonel Ernest F. Dukes
Lieutenant Colonel Edward A. Everitt, Jr.
Major Clifford I. Hunn

New York Port of Embarkation, Brooklyn, New York
Brigadier General Homer M. Groninger, Brooklyn, New York
Lieutenant Colonel Harry W. Maas

Panama Canal Department (Miscellaneous), Quarry Heights, C. Z.
Colonel Ralph M. Parker
Lieutenant Colonel Clifford A. Eastwood
Lieutenant Colonel Harold Thompson

Russian Language Student
Captain Benjamin W. Heckemeyer, Harvard University, Cambridge, Massachusetts

Commanding Officer Troops, U. S. Army Transport
Lieutenant Colonel Walter W. Boon

Office of the Secretary of War, Washington, D. C.
Lieutenant Colonel Joseph L. Phillips

Instructor Guatemalan Army
Lieutenant Colonel Edward L. N. Glass, American Legation, Guatemala City, Guatemala

Duty, Camp Dix, New Jersey

Lieutenant Colonel
Holmes G. Paulin

Station Complement

Colonels
Selwyn D. Smith, Hinesville, Georgia
Stephen W. Winfree, Fort McPherson, Georgia

Lieutenant Colonels
Robert O. Annin, Fort Stevens, Oregon
Frank L. Whittaker, Fort Jackson, South Carolina

Awaiting Retirement

Colonel Arthur Poillon
Colonel Daniel D. Tompkins, Atlanta, Georgia
Major James G. Patterson, Presidio of San Francisco, California

Detailed in the Adjutant General's Department

Majors
Lyman L. Judge, Ford Ord, California
Thomas Robinson, Seventh Corps Area, Omaha, Nebraska
Winfield C. Scott, Albrook Field, Canal Zone

Captains
Wallace H. Barnes, Fort Knox, Kentucky
Ralph T. Garver, Manila, P. I.
John J. LaPage, Presidio of San Francisco, California
Charles A. Sheldon, Fort Bliss, Texas

Duty with Air Corps

First Lieutenants
Robert R. Gideon, Jr., Randolph Field, Texas
Neil D. Van Sickle, Randolph Field, Texas

Second Lieutenants
Milton C. Barnard, 2d, Montgomery, Aalabama
Allan A. Crockett, Montgomery, Alabama
John R. East, Jr., Montgomery, Alabama
John Z. Endress, Moffett Field, California
George J. LaBreche, Randolph Field, Texas
John W. Norvell, Randolph Field, Texas
James R. Taylor, Randolph Field, Texas
Edward J. Walker, Montgomery, Alabama

Detailed in Coast Artillery Corps

Lieutenant Colonels
Lloyd W. Biggs, Manila, P. I.
Henry H. Cameron, Fort Williams, Maine
Donald C. Hawley, Fort MacArthur, California
John Kennard, Quarry Heights, Canal Zone

Majors
Richard H. Darrell, Fort Crockett, Texas
Donald W. Sawtelle, Manila, P. I.
Benjamin A. Thomas, Fort Barrancas, Florida

Captains
George P. Berilla, Jr., Quarry Heights, Canal Zone
John L. Hitchings, Fort Barrancas, Florida
Albert A. Matyas, Quarry Heights, Canal Zone

Detailed in Finance Department

Majors
Frederick W. Drury, Washington, D. C.
Charles H. Martin, Fort Riley, Kansas

Captain
August W. Farwick, Fort Knox, Kentucky

Detailed in the Inspector General's Department

Colonels
Joseph P. Aleshire, Headquarters Seventh Corps Area, Chicago, Illinois
William C. Christy, Quarry Heights, Canal Zone
John B. Johnson, War Department, Washington, D. C.
Troup Miller, Governors Island, New York
Edgar W. Taulbee, Fort Bliss, Texas

Lieutenant Colonels
Thomas A. Dobyns, Jr., Quarry Heights, Panama Canal Zone
Edward J. Dwan, Presidio of San Francisco, California
Oliver L. Haines, Fort Sam Houston, Texas
Frederick Herr, Schofield Barracks, T. H.
Nelson M. Imboden, Fort Knox, Kentucky
John O. Lawrence, Manila, P. I.
Donald S. Perry, Manila. P. I.
Frank G. Ringland, Fort Benjamin Harrison, Indiana
Richard E. Tallant, Fort Jackson, South Carolina
Pearl L. Thomas, Boston, Massachusetts

Majors
Oscar W. Koch, Fort Benning, Georgia
Marcellus L. Stockton, Jr., Fort Ord, California

Detailed in the Ordnance Department

Captains
Angelo R. Del Campo, Jr., Aberdeen Proving Ground, Maryland
Gerard C. Cowan, San Juan, Puerto Rico
Ewing C. Johnson, Scott Field, South Carolina
George H. Minor, Quarry Heights, Canal Zone
Edward D. Mohlere, San Juan,Puerto Rico
John B. Nance, Hamilton Field, California
Don R. Ostrander, Langley Field, Virginia
Paul W. Scheidecker, Lowry Field, Denver, Colorado

Detailed in the Quartermaster Corps

Lieutenant Colonels
Theodore B. Apgar, Front Royal, Virginia
Richard N. Atwell, Holabird, Maryland
Harold deB. Bruck, Fort Banks, Massachusetts
George A. King, Falmouth, Massachusetts
Fred W. Koester, San Mateo, California
Albert E. McIntosh, Scott Field, Illinois
Paul H. Morris, Front Royal, Virginia
Christopher C. Strawn, Fort Bliss, Texas
Morduant V. Turner, Hot Springs, Arkansas
Andrew J. Wynne, Fort Sill, Oklahoma

Majors
Clyde B. Bell, Schofield Barracks, T. H.
Edward H. deSaussure, Front Royal, Virginia
William L. Hamilton, Fort Ethan Allen, Vermont
Ralph E. Ireland, Fort Reno, Oklahoma
Paul G. Kendall, Fort Robinson, Nebraska
Granville V. Morse, Fort Custer, Michigan
Francis L. Ready, Holabird, Maryland
Thomas F. Sheehan, Fort Bliss, Texas
Mortimer F. Sullivan, Fort Hancock, New Jersey
John T. Ward, Fort Baker, California
Joseph M. Williams, Fort Ord, California
Garnett H. Wilson, Presidio of Monterey, California

Captains
Raymond M. Barton, Westover Field, Massachusetts
Clyde Massey, Fort Thomas, Kentucky
John G. Minniece, Jr., Fort Robinson, Nebraska
Samuel L. Myers, Fort Bragg, North Carolina
Maynard D. Pedersen, Fort Sam Houston, Texas
Carroll H. Prunty, Fort Reno, Oklahoma
Joseph R. Ranck, Fort McPherson, Georgia
Edward W. Sawyer, Fort Robinson, Nebraska
Frank R. Sibert, Fort Hamilton, New York
Carl D. Womack, Fort Logan, Colorado

Detailed in the Signal Corps

Captains
Carl L. Lindquist, Fort Benning, Georgia
Richard A. Smith, Manila, P. I.
Eric H. F. Svensson, Jr., Washington, D. C.
Wilfred H. Tetley, Schofield Barracks, T. H.
Frank G. Trew, Barksdale Field, Louisiana
Albert B. Turner, Jr., Fort Knox, Kentucky
Grant A. Williams, Fort Knox, Kentucky

Duty with the National Guard

Brigadier General
Benjamin O. Davis, New York City, New York

Colonels
Joseph A. Baer, Governors Island, New York
Wilfrid M. Blunt, New York City, New York
Guy W. Chipman, Chicago, Illinois
Thomas L. Sherburne, Chicago, Illinois
Howard R. Smalley, Baltimore, Maryland
William W. West, Newark, New Jersey

Lieutenant Colonels
McFarland Cockrill, Dallas, Texas
Carlisle B. Cox, Cheyenne, Wyoming
Charles E. Dissinger, National Guard Bureau, Washington, D. C.
Paul C. Febiger, Casper, Wyoming
Mack Garr, Cleveland, Ohio
Dwight Hughes, Newark, New Jersey
Charles R. Johnson, Urbana, Illinois
John E. Maher, National Guard Affairs, Headquarters, Third Corps Area, Baltimore, Maryland
John T. McLane, Headquarters, Ninth Corps Area, San Francisco, Calif.
Henry McE. Pendleton, San Antonio, Texas
Duncan G. Richart, Des Moines, Iowa
Perry E. Taylor, Fort Worth, Texas
Kramer Thomas, Philadelphia, Pennsylvania
Guy D. Thompson, Burlington, Iowa
Richard D. Trimble, Houston, Texas
Herbert E. Watkins, Brooklyn, New York

Duty with the Organized Reserves

Colonels
Horace T. Aplington, Los Angeles, California
N. Butler Briscoe, Louisville, Kentucky
Frank K. Chapin, Philadelphia, Pennsylvania
Francis C. V. Crowley, Oklahoma City, Oklahoma
George B. Hunter, New Orleans, Louisiana
Guy Kent, Boston, Massachusetts
Joseph C. King, Philadelphia, Pennsylvania
Carl H. Muller, St. Louis, Missouri
Edwin O'Connor, New York City, New York
Bruce Palmer, Baltimore, Maryland
John A. Robenson, Omaha, Nebraska
Herbert E. Taylor, Salt Lake City, Utah
John C. F. Tillson, Jr., Baltimore, Maryland
Frederic W. Whitney, Oklahoma City, Oklahoma

Lieutenant Colonels
Henry T. Allen,Temple Building, Rochester, New York
Frank H. Barnhart, Champaign, Illinois
Edmund M. Barnum, Boston, Massachusetts
Roy E. Craig, Omaha, Nebraska
Donald R. Dunkle, Washington, D. C.
James R. Finley, Tacoma, Washington
Lawrence C. Frizzell, Atlanta, Georgia
Geoffrey Galway, New York City, New York
Roye P. Gerfen, Chicago, Illinois
William T. Haldeman, Kansas City, Missouri
Thomsa G. Hanson, Jr., Los Angeles, California
Gordon J. F. Heron, Fort Hayes, Ohio
John D. Hood, New York City, New York
Catesby apC. Jones, New York City, New York
James A. Kilian, Chicago, Illinois
Hans E. Kloepfer, Denver, Colorado
Arthur T. Lacey, Albany, New York
Kent C. Lambert, New York City, New York
Thomas F. Limbocker, Detroit, Michigan
Paul J. Matte, Knoxville, Tennessee
John T. Minton, Tuscon, Arizona
Welton M. Modisette, Newark, New Jersey
George A. Moore, Rutland, Vermont
Clyde Pickett, Detroit, Michigan
Otis Porter, Chicago, Illinois
Terrill E. Price, Jacksonville, Florida
Theodore M. Roemer, Philadelphia, Pennsylvania
Frederick H. L. Ryder, DuBois, Pennsylvania
Henry M. Shoemaker, Harlingen, Texas
C. Loyd Stafford, Des Moines, Iowa
James B. Taylor, San Antonio, Texas
Thomas D. Wadelton, Indianapolis, Indiana
Otto Wagner, Milwaukee, Wisconsin
John P. Wheeler, Richmond, Virginia
Robert O. Wright, Norfolk, Virginia

Majors
Aladin J. Hart, Pittsburgh, Pennsylvania
John B. Reybold, New Haven, Connecticut
John R. Thornton, Atlanta, Georgia

Duty with the R.O.T.C.

Colonels
Herman Kobbe, Los Angeles, California
Kerr T. Riggs, University of Georgia, Athens, Georgia

Lieutenant Colonels
George S. Andrew, Norwich University, Northfield, Vermont
Harry W. Benson, Cannon City High School, Cannon City, Colorado
Frank E. Bertholet, Pasadena, California
Harry L. Branson, Pueblo High School, Pueblo, Colorado
Harry A. Buckley, Alameda High School, Alemeda, California
Malcolm Byrne, St. Mel High School, Chicago, Illinois
George P. Cummings, Riverside, California
Alfred J. deLorimer, University of Illinois, Champaign, Illinois
Murray H. Ellis, University of Illinois, Champaign, Illinois
Waldemar A. Falck, University of Arizona, Tuscon, Arizona
Herbert E. Featherstone, Central Catholic High School, San Antonio, Texas
Horace W. Forster, Mattoon, Illinois
Rossiter H. Garity, University of Illinois, Champaign, Illinois
Robert MacD. Graham, Kansas City High Schools, Kansas City, Missouri
William R. Hamby, Columbus, Georgia
Benjamin F. Hoge, Culver, Indiana
Oliver I. Holman, New Mexico Military Institute, Roswell, New Mexico
Charles A. Horger, Ashland, Kentucky
Renn Lawrence, Chicago High Schools, Chicago, Illinois
Gene R. Mauger, Houston, Texas
James G. Monihan, St. Ignatius High School, San Francisco California
Halbert H. Neilson, Nashville High School, Nashville, Tennessee
Olin C. Newell, University of Georgia, Athens, Georgia
William V. D. Ochs, Wilmington, North Carolina
Hal M. Rose, Owensboro, Kentucky
John P. Scott, Phoenix, Arizona
Melvin S. Williamson, Decatur, Georgia
George D. Wiltshire, Virginia Military Institute, Lexington, Virginia
Donald A. Young, Amherst, Massachusetts

Majors
Edwin M. Burnett, Texas A & M, College Station, Texas
Charles R. Chase, Claremore, Oklahoma
Clarence C. Clendennen, Augusta Military Academy, Fort Defiance Va.
Claude W. Feagin, Glendale, California
Stanton Higgins, Johnson City, Tennessee
Joseph I. Lambert, Chicago, Illinois
Morris H. Marcus, Michigan State College, East Lansing, Michigan
Phillip B. Shotwell, Logan, Utah
Benners B. Vail, Montgomery, Alabama
Arthur N. Willis, Shreveport, Louisiana

Captain
Matthew W. Kane, Western Military Academy, Alton, Illinois

Recruiting Duty

Colonels
Oscar Foley, Atlanta, Georgia
Stanley Koch, Houston, Texas
Aubrey Lippincott, Los Angeles, California
Emil P. Pierson, New York City, New York

Lieutenant Colonels
Jacob A. Blankenship, Brooklyn, New York
Charles L. Clifford, Jackson, Mississippi
James I. Gibbon, Fort McDowell, California
Wharton G. Ingram, New York City, New York
Brock Putnam, Hartford, Connecticut
John L. Rice Boston, Massachusetts
Gilbert Rieman, Fort McDowell, California
Randolph Russell, Brooklyn, New York
Alden H. Seabury, Peoria, Illinois
Edward F. Shaifer, Chicago, Illinois
James E. Slack, Fort Moultrie, South Carolina

Majors
Martin A. Fennell, Fort Slocum, New York
Samuel R. Goodwin, Fort Slocum, New York
Louis B. Rapp, Fort McDowell, California

Captain
Rogers A. Gardner, Fort McDowell, California

Duty with Civilian Conservation Corps

Lieutenant Colonels
Sidney V. Bingham, Baltimore, Maryland
John W. Carroll, Little Rock, Arkansas
Wade C. Gatchell, Fort Knox, Kentucky
William R. Irvin, Fort Oglethorpe, Georgia
Manly F. Meador, Des Moines, Iowa
Pearson Menoher, Littleton, Colorado
J. Frank Richmond, Fort Bliss, Texas
William G. Simmons, Seventh Corps Area, Omaha, Nebraska

Major
Joseph M. Glasgow, Fresno, California

Liaison Officers

Lieutenant Colonel
Willard S. Wadelton, Chemical Warfare School, Edgewood Arsenal, Maryland

Majors
Hugh G. Culton, Quantico, Virginia
Dana G. McBride, Signal School, Fort Monmouth, New Jersey

Duty with Armored Force
Fort Knox, Kentucky

Major General
Adna R. Chaffee, Commanding

Brigadier Generals
Henry W. Baird
Jack W. Heard

Colonels
Raymond E. McQuillin
Alexander D. Surles

Lieutenant Colonels

Roderick R. Allen
Burton C. Andrus
William T. Bauskett, Jr.
Alfred L. Baylies
Clarence C. Benson
Francis T. Bonsteel
Stephen Boon, Jr.
Truman E. Boudinot
Richard W. Carter
Leo B. Conner
Lawrence G. Forsythe
William T. Hamilton
Byron Q. Jones
John D. Kelly
Leslie F. Lawrence
Bertrand Morrow
William Nalle
Milton H. Patton
Lewis A. Pulling
Maurice Rose
Herbert V. Scanlan
Edwin E. Schwien
Albert C. Smith
William R. Stickman
Robert W. Strong
Lucian K. Truscott, Jr.
Victor W. B. Wales
Isaac G. Walker

Majors

John M. Bethel
Charles V. Bromley, Jr.
Charles H. Ryan
Clyde A. Burcham
Douglas Cameron
Harold Engerud
Richard B. Evans
William T. Fletcher
James V. Gagne
Edwin C. Greiner
George B. Hudson
Christian Knudsen
George R. McElroy
Kevin O'Shea
Frederick R. Pitts
George W. Read, Jr.
Hayden A. Sears
John K. Sells
Albert S. J. Stovall, Jr.
David A. Taylor
Basil G. Thayer
Samuel P. Walker
Richard T. Wilson
William P. Withers

Captains

Creighton W. Abrams, Jr.
David V. Adamson
James D. Alger
Robert E. Arnette, Jr.
Robert H. Bayne
Philip H. Bethume
Bogardus S. Cairns
George W. Coolidge
William W. Culp
Wayne J. Dunn
Meyer A. Edwards, Jr.
Ralph E. Haines, Jr.
Jesse M. Hawkins, Jr.
David L. Hollingsworth
Malcolm D. Jones, Jr.
Rufus L. Land
McPherson LeMoyne
Charles E. Leydecker
Cornelius A. Lichirie
Norman A. Leob
Norman K. Markle, Jr.
Robert E. McCabe
Ned T. Norris
William H. Nutter
William R. Prince
Glenn F. Rogers
Edwin A. Russell, Jr.
John L. Ryan, Jr.
Hilwert S. Streeter
Alexander D. Surles, Jr.
Graves C. Teller
Frank J. Thompson
Edgar J. Treacy, Jr.
Thomas F. Van Natta
David A. Watt, Jr.
Gustavus W. West
Prentice E. Yeomans

First Lieutenants

Joe Ahee
John K. Bowles, Jr.
Howard V. Cooperider
William G. Dean
Walter S. Gray
William H. Hale
Samuel M. Horgan
Thomas L. McCrary
Gailon M. McHaney
Lemuel E. Pope
Donald M. Schorr
William A. Sussmann
Charles W. Walson
Matthew Whalen
Arthur T. Williams, 3d

Second Lieutenants

Edward D. Lucas, Jr.
James F. Williams, Jr.

Duty with Armored Force
Fort Benning, Georgia

Brigadier General
George S. Patton, Jr.

Majors

Claude O. Burch
Leslie M. Grener
Isaac D. White

Captains

Wendell Blanchard
Thomas W. Chandler
Lawrence R. Dewey
Paul A. Disney
Albert E. Harris

First Lieutenants

Benjamin M. Bailey, Jr.
Edward McC. Dannemiller
Roberts S. Demitz

Second Lieutenant
John W. N. Schulz, Jr.

CAVALRY UNITS

First Cavalry Division, Fort Bliss, Texas

Major General
Robert C. Richardson, Jr., Commanding

Brigadier General
Innis P. Swift, 2d Cavalry Brigade

Colonels

†John K. Brown
Frederick D. Griffith, Jr.
*Frederick Gilbreath

Lieutenant Colonels

Sexton Berg
Frederic W. Boye
Kirk Broaddus
David H. Blakelock
*Latham H. Collins
*Julian W. Cunningham
*Louis G. Gibney
†Harold B. Gibson
†John H. Irving
†Louis LeR. Martin

Majors

William S. Biddle
†Don E. Carleton
Kenneth G. Hoge
*Eugene C. Johnston
Halley G. Maddox
*Harry C. Mewshaw
†Ralph M. Neal
*Otto Stillinger

Captains

Harry W. Candler
John L. De Pew
*Edward J. Doyle
†Augustine D. Dugan
Royce A. Drake
*Walter E. Finnegan
†Frederick H. Gaston, Jr.
†William H. Greear
Perry B. Griffith
*Ralph S. Harper
*Henry S. Jernigan
Laurence K. Ladue
†Alexander M. Miller, 3d
*Powhatan M. Morton
*Delk M. Oden
†Robert W. Porter, Jr.
Clark L. Ruffner
†H. Jordan Theis
*Arthur H. Wilson, Jr.
Franklin F. Wing, Jr.
†Norman M. Winn

First Lieutenants

†Frederic W. Boye, Jr.
†Haskett L. Conner, Jr.
*John B. Maxwell, 2d
*William H. Patterson, Jr.
†Ira B. Richards, Jr.
†Edward McD. Serrem
*William W. West, 3d
†Henry B. Wilson
†Jasper J. Wilson

Second Lieutenants

Dennis L. Barton
Scott M. Case
*William M. Delaney
George C. Hines
*Thomas L. McKnight
†John B. McPherson
Montgomery C. Meigs
James H. Pitman
Gilbert H. Woodward

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*Seventh Cavalry.
†Eighth Cavalry.

First Cavalry Division, Fort Clark, Texas

Brigadier General
John Millikin, First Cavalry Brigade

Colonel
*Henry J. M. Smith

Lieutenant Colonels

*Richard L. Creed
*Glenn S. Finley
*Harry A. Flint
*Harrison Herman
Charles G. Hutchinson
*Russell C. Winchester

Majors

*Alan L. Fulton
*Hugh F. T. Hoffman

Captains

*Woodbury M. Burgess
*James O. Curtis, Jr.
Kelton S. Davis
Harold M. Forde
*William A. Fuller
*John F. Polk
Thomas D. Roberts
*Daniel E. Still
*Theodore C. Wenzlaff

First Lieutenants

*Vincent L. Boylan
*Robert W. Crandall
*Richard L. Irby
*Clifford L. Miller, 2d
Charles J. Parsons, Jr.
*John P. Tomhave
*William LeR. Turner

Second Lieutenants

Dan P. Briggs
James S. Greene, Jr.
Charles B. Hazeltine, Jr.
*Edwin O'Connor, Jr.

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*5th Cavalry.

(For First Cavalry, see Armored Force, Fort Knox, Ky.)

Brigadier General
Terry de la M. Allen, 3d Cavalry Brigade, Fort Riley, Kansas

Second Cavalry, Fort Riley, Kansas

Colonel
Harry D. Chamberlin

Lieutenant Colonels

Wilkie C. Burt
John T. Cole

Majors

Charles W. Fake
Harry Knight

Captains

Roland A. Browne
Roy W. Cole, Jr.
Andrew A. Frierson
John S. Growdon
Stephen W. Holderness
Whitside Miller
Carl LaV. Rickenbaugh
Lawrence E. Schlanser

First Lieutenants

Henry L. Crouch, Jr.
Phillip B. Davidson, Jr.
Robert C. Erlenbusch
Edward F. Gillivan
Lindsay C. Herkness, Jr.
Allen D. Hulse
John J. Kelly
Edgar W. Schroeder
Wilbur C. Strand

Second Lieutenant
Robert J. Fate

Third Cavalry, Fort Myer, Virginia

Colonel
William W. Gordon

Lieutenant Colonels

John J. Bohn
Rexford E. Willoughby

Majors

John H. Collier
Frederic de L. Comfort
Thomas Q. Donaldson, Jr.
George G. Elms
James K. Mitchell

Captains

Andrew J. Boyle
Paul D. Harkins
Hamilton H. Howze
Charles B. McClelland, Jr.
Richard E. Nelson
James H. Polk
Paul A. Ridge
Donald O. Vars
David Wagstaff, Jr.

First Lieutenants

Leslie H. Cross
Ralph L. Foster

Second Lieutenants

George C. Benjamin
Robert R. Dodderidge
Walter Greenwood, Jr.
Milford F. Stablein
Clifford E. Lippincott
Harry A. Schendel, Jr.

Fourth Cavalry, Fort Meade, South Dakota

Colonel

Howell M. Estes

Lieutenant Colonels

John B. Coulter
Harold G. Holt
Cornelius F. O'Keefe

Major

Frank T. Turner

Captains

Charles C. W. Allan
Edward C. Dunn
Mitchell A. Giddens
Vernon P. Mock
Robert E. Obrien, Jr.
Francis McD. Oliver, Jr.
Robert J. Quinn, Jr.
John F. Rhoades
Charles P. Walker

First Lieutenants

Perry E. Conant
James H. Critchfield
Tracy B. Harrington
Victor L. Johnson, Jr.
Tom E. Matlach
Donald M. Simpson
John H. Swenson

Second Lieutenants

Alfred W. Bruneau
Emerson W. Grant

(For Fifth Cavalry, see First Cavalry Division, Fort Clark, Texas)

Sixth Cavalry, Fort Oglethorpe, Georgia

Lieutenant Colonels

John A. Considine
Gersum Cronander
Chester E. Davis
Thomas J. Heavey
Arthur H. Truxes

Majors

Charles E. Morrison
James H. Phillips
Elmer V. Stansbury

Captains

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Kelso G. Clow
Brendan McK. Greeley
William O'C. Heacock
Anthony F. Kleitz, Jr.
Harry E. Lardin
John O'D. Murtaugh
Bruce Palmer, Jr.
Gordon B. Rogers
Thomas F. Taylor

First Lieutenants

Thomas B. Bartel
David B. Goodwin
Elwin T. Knight

Second Lieutenants

Samuel McC. Goodwin
Armistead R. Harper
Wilson M. Hawkins
Thomas A. E. Mosley, Jr.
Dean T. Vanderhoef
Rush S. Wells, Jr.
George M. White
James E. Tyler

(For Seventh and Eighth Cavalry, see First Cavalry Division, Fort Bliss, Texas)

Ninth Cavalry, Fort Riley, Kansas

Lieutenant Colonels

Walter E. Buchly
Percy S. Haydon
William N. Todd, Jr.
Candler A. Wilkinson

Captains

Murray B. Crandall
John J. Davis
Marshall W. Frame
Frank S. Henry

First Lieutenant

George W. England, Jr.

Tenth Cavalry (Less Second Squadron and Troop "F"), Fort Leavenworth, Kansas

Lieutenant Colonels

Thomas W. Ligon
William H. W. Youngs

Major

Charles H. Reed

Captains

Leander LaC. Doan
Robert G. Lowe
Zachery W. Moores

First Lieutenant

Edwin C. Haggard

Tenth Cavalry (Second Squadron), West Point, New York

Lieutenant Colonel

Marion Carson

Captains

Edwin H. J. Carns
Peter C. Hains, 3d
John L. Hines, Jr.
Harry W. Johnson
Sherburne Whipple, Jr.

Tenth Cavalry ("F" Troop), Fort Myer, Virginia

Captains

O'Neil K. Kane
Basil L. Riggs
Edward W. Williams

Eleventh Cavalry, Presidio of Monterey, California (En route, Seeley and Campo, California)

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Alton W. Howard
Harold M. Rayner

Major

Alexander George

Captains

William J. Bradley
Thomas L. Harrold
James L. Hathaway
Charles M. Iseley
*James W. Snee
Shelby F. Williams

First Lieutenants

John W. Dobson
Stephen W. Downey, Jr.
James D. Green
*Marshall Wallach

Second Lieutenants

Herbert M. Bowlby, Jr.
Thomas C. Chamberlain
*Wallace L. Clement
*Robert E. Maxwell
*James L. Smiley

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*To Campo, California.

Twelfth Cavalry (Less Second Squadron), Fort Brown, Texas

Colonel

Arthur E. Wilbourn

Lieutenant Colonels

Eustis L. Hubbard
Alexander B. MacNabb
Ralph I. Sasse
Harold P. Stewart

Majors

Robert Edwards
Henry L. Kinnison, Jr.

Captains

Raymond C. Adkisson
Clarence K. Darling
Charles J. Hoy
Edward C. D. Scherrer

First Lieutenants

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Michael S. Davison
James LeR. Rogers

Second Lieutenants

John P. Gerald
Thomas B. Hargis, Jr.
Henry P. Heid, Jr.
Rowland H. Renwanz
Ralph M. Rogers

Twelfth Cavalry (Second Squadron), Fort Ringgold, Texas

Lieutenant Colonels

Frank C. DeLangton
Frederick R. Lafferty
Callie H. Palmer

Captains

Harold L. Richey
Chandler P. Robbins, Jr.

First Lieutenants

Levin L. Lee
Lyle E. Peterson
John C. F. Tillson, 3d

Lieutenant

Joseph L. McCroskey

(For Thirteenth Cavalry, see Armored Force, Fort Knox, Kentucky)

Fourteenth Cavalry (Less First Squadron), Fort Riley, Kansas

Colonel

Arthur H. Wilson

Lieutenant Colonels

Erskine A. Franklin
Hans C. Minuth
Spencer A. Townsend

Majors

Charles P. Amazeen
Walter Burnside

Captains

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Thomas D. Gillis
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First Lieutenant

Robert E. McMahon

Second Lieutenants

James F. Kreitzer
Robert W. Strong, Jr.
Eugene J. White

Fourteenth Cavalry (First Squadron), Fort Sheridan, Illinois

Lieutenant Colonels

Carleton Burgess
Charles B. Hazeltine
Lawrence B. Wyant

Captains

Walter G. Gleye
Robert W. Rayburn
Henry M. Zeller

First Lieutenants

Leo Gunnard Carlson
Leland W. Cramer

Second Lieutenant

Francis W. Adams

Twenty-sixth Cavalry, Fort Stotesenburg, P. I.

Colonel

R. Blaine

Lieutenant Colonels

Philip C. Clayton
Heywood S. Dodd
Frederick F. Duggan
Carter R. McLennan
Gyles Merrill
Frank Nelson
Clinton A. Pierce

Majors

Daniel P. Buckland
Claude A. Thorp
Lee C. Vance

Captains

William G. Bartlett
James C. Blanning
William E. Chandler
Joseph A. Cleary
Harry J. Fleeger
Theodore F. Hurt, Jr.
Paul M. Jones
Hubert W. Ketchum
Hugh W. Stevenson
Thomas J. H. Trapnell
William S. Van Nostrand

First Lieutenants

Joseph R. Barker, 2d
Charles R. Bowers
Ralph B. Praeger

Reconnaissance Troops

(To rank)

Captain James B. Quill, 1st Reconnaissance Troop,
Fort Devens, Massachusetts

Captain Russel V. D. Janzan, 1st Reconnaissance Troop,
Fort Devens, Massachusetts

Major Frederick W. Fenn, 2d Reconnaissance Troop,
Fort Sam Houston, Texas

First Lieutenant Jack L. Grubb, 2d Reconnaissance Troop,
Fort Sam Houston, Texas

Captain Harry W. Miller, 3d Reconnaissance Troop,
Fort Lewis, Washington

Captain Leonard C. Shea, 3d Reconnaissance Troop,
Fort Lewis, Washington

Captain Raymond D. Palmer, 4th Reconnaissance Troop,
Fort Benning, Georgia

Captain Loren F. Cole, 4th Reconnaissance Troop,
Fort Benning, Georgia

Captain John H. Riepe, 5th Reconnaissance Troop,
Fort Custer, Michigan

First Lieutenant Donald W. Thackeray, 5th Reconnaissance Troop,
Fort Custer, Michigan

Major Marcus E. Jones, 6th Reconnaissance Troop,
Fort Riley, Kansas

Captain F. Clay Bridgewater, 6th Reconnaissance Troop,
Fort Riley, Kansas

First Lieutenant William F. Beaty, 6th Reconnaissance Troop,
Fort Riley, Kansas

Captain Milo H. Matteson, 7th Reconnaissance Troop,
Fort Ord, California

Captain Cecil Himes, 7th Reconnaissance Troop,
Fort Ord, California

Captain Brainard S. Cook, 8th Reconnaissance Troop,
Fort Jackson, South Carolina

First Lieutenant John J. Carusone, 8th Reconnaissance Troop,
Fort Jackson, South Carolina

Captain Charles G. Meehan, 9th Reconnaissance Troop,
Fort Bragg, North Carolina

Captain William F. Damon, Jr., 9th Reconnaissance Troop,
Fort Bragg, North Carolina

Duty with First Cavalry Troop, Reconnaissance (Sep.), Fort Davis, Panama Canal Zone

Captains

Clayton J. Mansfield
William V. Martz
Jules V. Richardson

Note: We had hoped to publish a roster of Cavalry Reserve officers, on active duty, but this was not feasible at this time.

Annual Meeting

The annual meeting of the United States Cavalry Association will be held at the Army and Navy Club, Washington, D. C., at 8:00 P.M., Monday, January 13, 1941.

Formal notification, together with proxy cards, will be sent to all members of the Association within the continental limits of the United States. Members who will be unable to be present are requested to return the proxy cards promptly to the Secretary, United States Cavalry Association, 1624 H Street, N.W., Washington, D. C.

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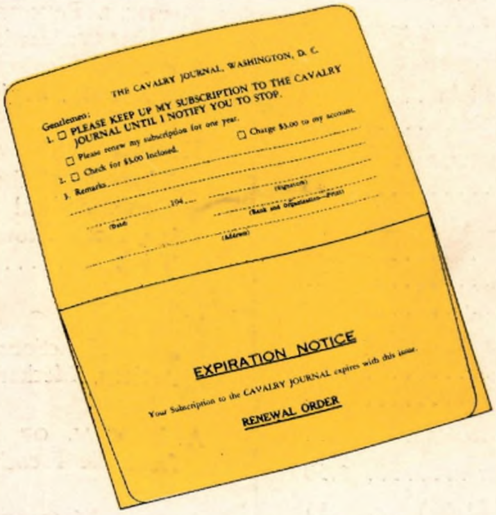

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